XR-CA370/CA370X

SERVICE MANUAL

AEP Model
UK Model

Ver 1.2 2003.02

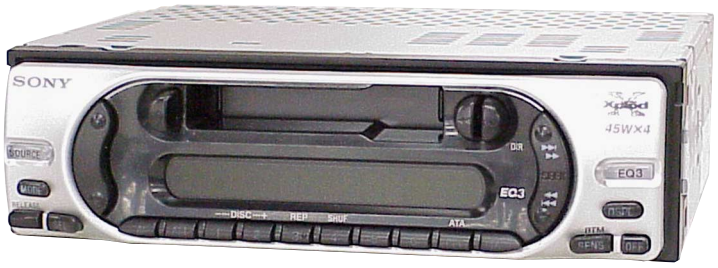


Photo: XR-CA370X

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-36SZ13-32

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.13 % (WRMS)
Frequency response	30 – 15,000 Hz
Signal-to-noise ratio	55 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 279 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz/450kHz
Sensitivity	MW: 30 µV LW: 40 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	45 W × 4 (at 4 ohms)

General

Outputs	Audio output Power aerial relay control terminal Power amplifier control terminal
Inputs	BUS control input terminal BUS audio input terminal
Tone controls	Low: ±10 dB at 60 Hz (Xplod) Mid: ±10 dB at 1 kHz (Xplod) High: ±10 dB at 10 kHz (Xplod)
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 178 × 50 × 178 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

9-874-223-03
2003B0500-1

© 2003.02

Sony Corporation
e Vehicle Company
Published by Sony Engineering Corporation

SONY®

TABLE OF CONTENTS

SERVICING NOTES 2

1. GENERAL
Location of Controls 3
Setting the Clock 3

2. DISASSEMBLY
2-1. Disassembly Flow 6
2-2. Sub Panel 6
2-3. Mechanism Deck (MG-36SZ13-32) 7
2-4. MAIN Board 7
2-5. Heat Sink 8
2-6. Bracket (MD) 8
2-7. DC Motor (Capstan/Reel) (M901) 9
2-8. Main Belt, Sub Belt (C) 9
2-9. Magnetic Head (Playback) (HP901) 10

3. MECHANICAL ADJUSTMENTS 11

4. ELECTRICAL ADJUSTMENTS 11
Tape Deck Section 11
Tuner Section 12

5. DIAGRAMS
5-1. Note for Printed Wiring Boards and Schematic Diagrams 13
5-2. Printed Wiring Board – MAIN Board – 15
5-3. Schematic Diagram – MAIN Board (1/2) – 16
5-4. Schematic Diagram – MAIN Board (2/2) – 17
5-5. Printed Wiring Board – CONTROL Board – 18
5-6. Schematic Diagram – CONTROL Board – 19
5-7. IC Pin Function Description 20

6. EXPLODED VIEWS
6-1. General Section 22
6-2. Front Panel Section 23
6-3. Main Board Section 24
6-4. Mechanism Deck Section (MG-36SZ13-32) 25

7. ELECTRICAL PARTS LIST 26

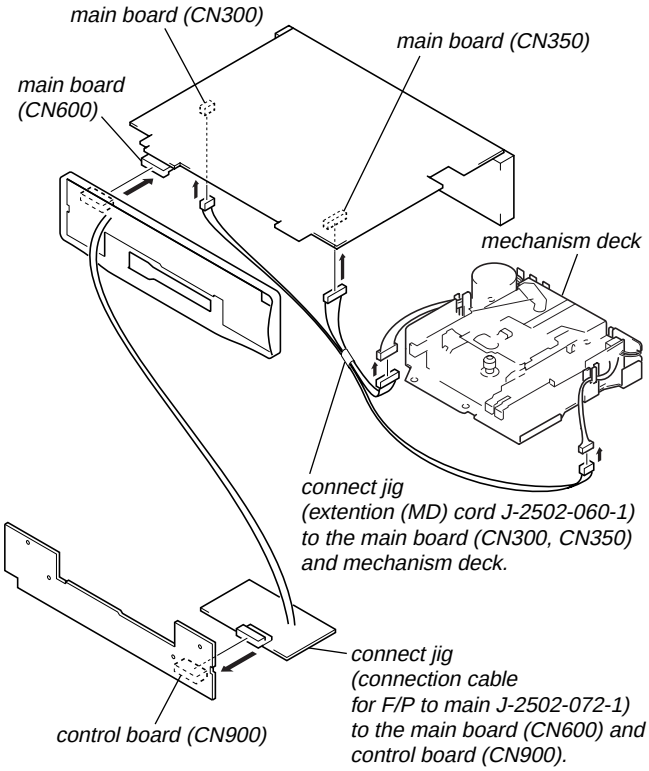
Flexible Circuit Board Repairing
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

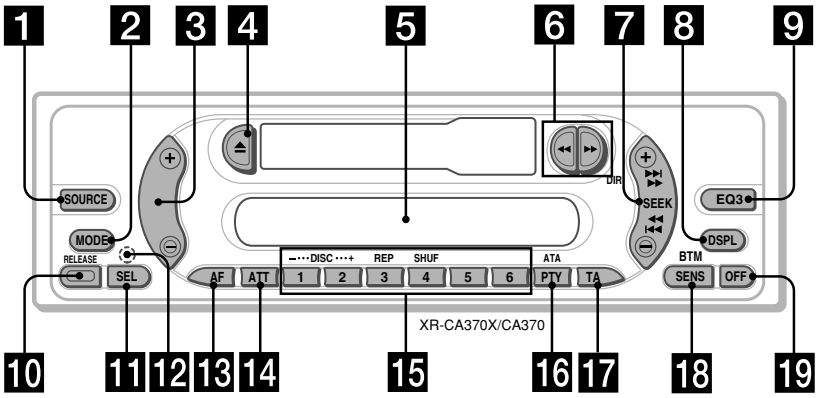
SERVICING NOTES

SERVICE POSITION

In checking the control board and main board, prepare two jigs (extension (MD) cord J-2502-060-1 and connection cable for F/P to main J-2502-072-1).



Location of controls



Refer to the pages listed for details.

1 **SOURCE (Radio/CD/MD) button**

2 **MODE button**
During radio reception:
Band select
During CD/MD playback:
CD/MD unit select

3 **Volume +/– button**

4 **⏏ (eject) button**

5 **Display window**

6 **◀◀/▶▶ (fast winding)/DIR (tape transport direction change) buttons**

7 **SEEK button**
Seek
Automatic Music Sensor
Manual search

8 **DSPL (display mode change) button**

9 **EQ3 button**

10 **RELEASE (front panel release) button**

11 **SEL (select) button**

12 **RESET button (located on the front side of the unit behind the front panel)**

13 **AF button**

14 **ATT (attenuate) button**

15 **Number buttons**
During radio reception:
Preset number select
During CD/MD playback:
(1) DISC –
(2) DISC +
(3) REP
(4) SHUF

16 **PTY (programme type)/ATA button**

17 **TA button**

18 **SENS/BTM button**

19 **OFF button***

* **Warning when installing in a car without ACC (accessory) position on the ignition key switch**
Be sure to press (OFF) on the unit for 2 seconds to turn off the clock display after turning off the engine.
When you press (OFF) momentarily, the clock display does not turn off and this causes battery wear.

Setting the clock

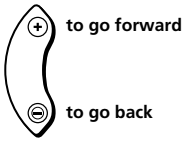
The clock uses a 24-hour digital indication.

Example: To set the clock to 10:08

1 **Press (DSPL) for 2 seconds.**

The hour indication flashes.

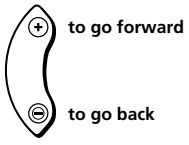
❶ **Press either side of the volume button to set the hour.**



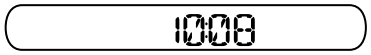
❷ **Press (SEL).**

The minute indication flashes.

❸ **Press either side of the volume button to set the minute.**



2 **Press (DSPL).**



The clock starts.

Cautions

- This unit is designed for negative earth 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the power connecting cord Ⓔ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all earth wires to a common earth point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.

Notes on the power supply cord (yellow)

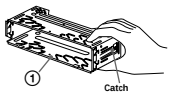
- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Parts list (1)

- The numbers in the list are keyed to those in the instructions.
- The bracket ① and the protection collar ④ are attached to the unit before shipping. Before mounting the unit, use the release keys ⑦ to remove the bracket ① and the protection collar ④ from the unit. For details, see "Removing the protection collar and the bracket (4)" on the reverse side of the sheet.
- **Keep the release keys ⑦ for future use as they are also necessary if you remove the unit from your car.**

Caution

Handle the bracket ① carefully to avoid injuring your fingers.



Note

Before installing, make sure that the catches on both sides of the bracket ① are bent inwards 2 mm. If the catches are straight or bent outwards, the unit will not be installed securely and may spring out.

Connection example (2)

***Notes* (2-B-ⓐ)**

- *Be sure to connect the earth cord before connecting the amplifier.*
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.*

***Tip* (2-B-ⓑ)**

For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

Connection diagram (3)

Ⓐ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

Warning

If you have a power aerial without a relay box, connecting this unit with the power connecting cord Ⓔ may damage the aerial.

Notes on the control leads

- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the AF (Alternative Frequency), TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW aerial in the rear/side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without a relay box cannot be used with this unit.*

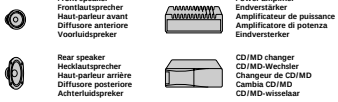
Memory hold connection

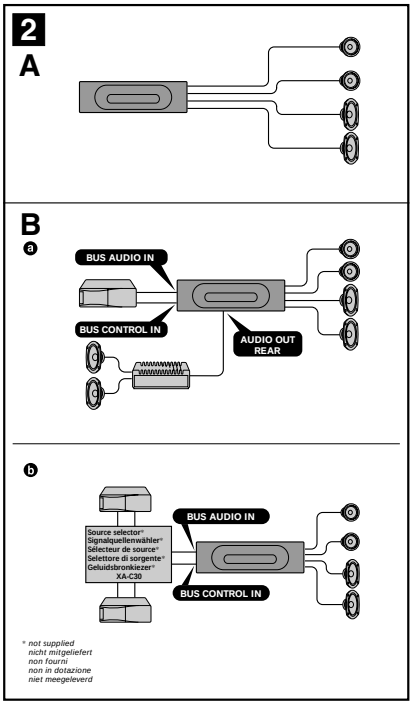
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

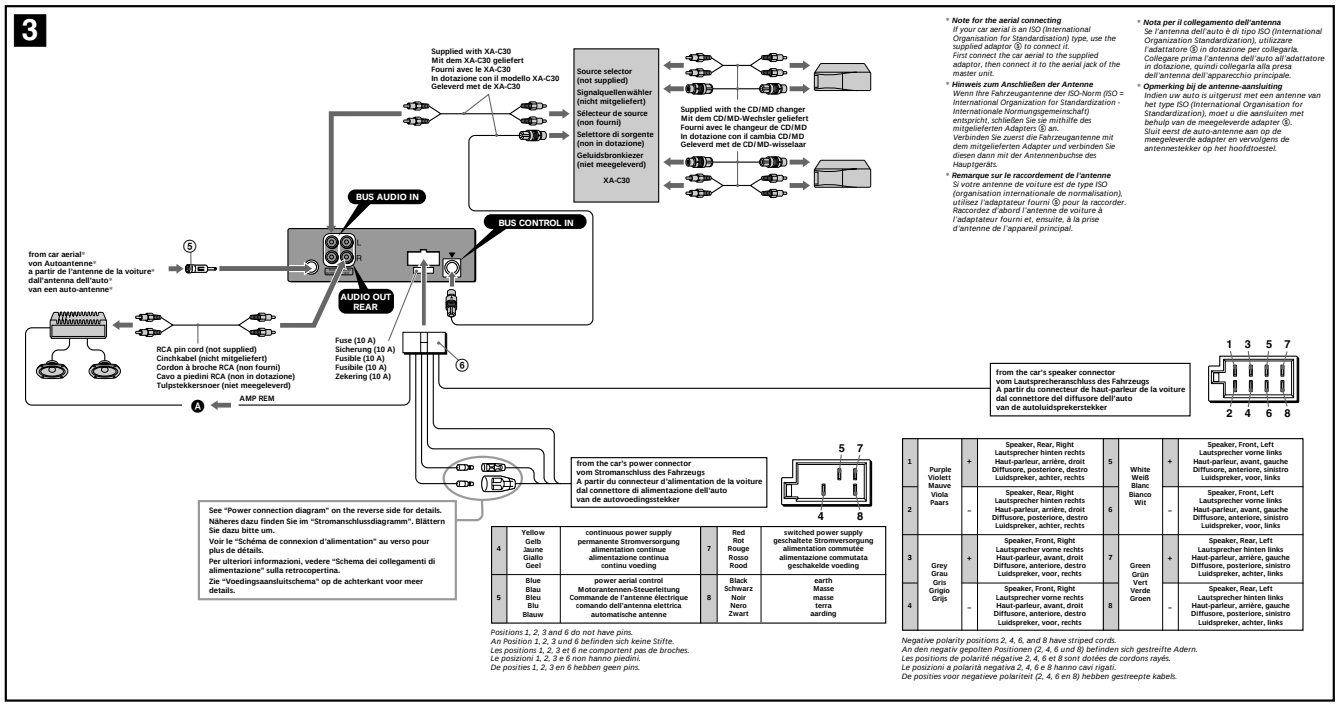
Notes on speaker connection

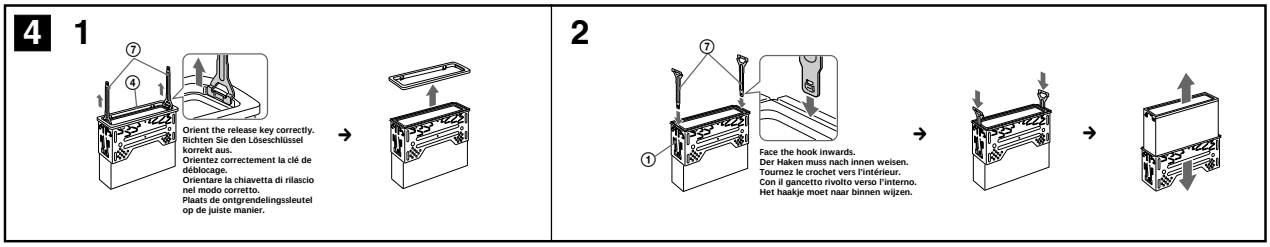
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker cords to each other.*

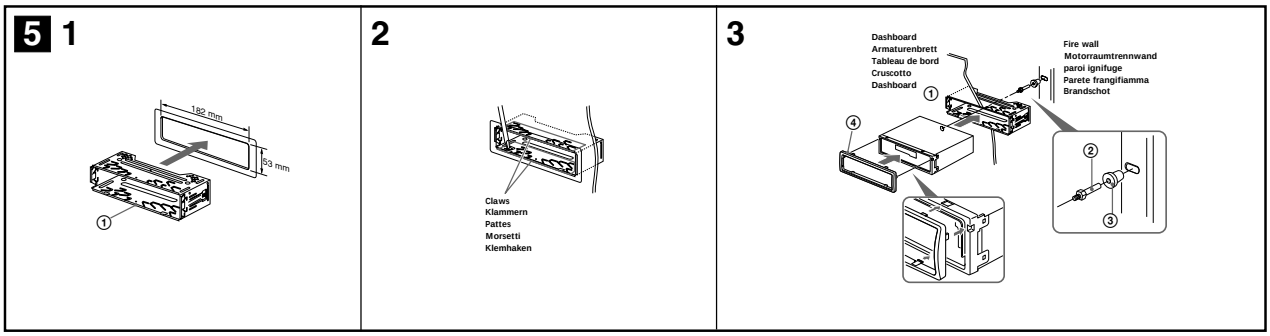
Equipment used in illustrations (not supplied)
In Abbildungen dargestellte Geräte (nicht mitgeliefert)
Appareils utilisés dans les illustrations (non fournis)
Apparecchiatura utilizzata nelle illustrazioni (non in dotazione)
Apparatuur gebruikt voor illustratiedoeleinden (niet meegeleverd)

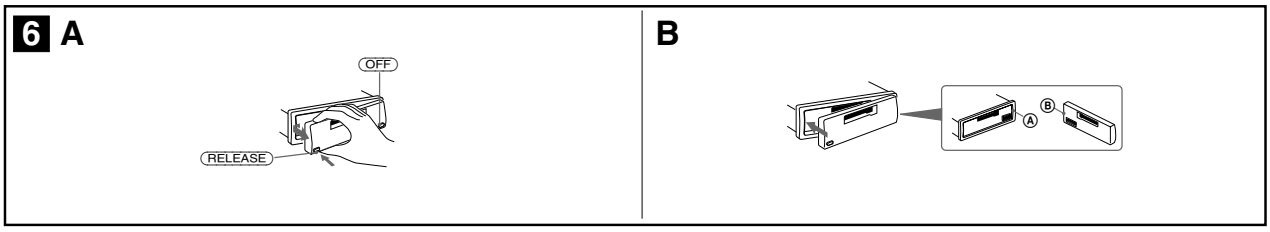





3
Supplied with XA-C30
Mit dem XA-C30 geliefert
Fourni avec le XA-C30
In dotazione con il modello XA-C30
Geleverd met de XA-C30
Source selector (not supplied)
Signalquellenwähler (nicht mitgeliefert)
Sélecteur de source (non fourni)
Selettore di sorgente (non in dotazione)
Geluidsbronkiezer (niet meegeleverd)
XA-C30
Supplied with the CD/MD changer
Mit dem CD/MD-Wechsler geliefert
Fourni avec le changeur de CD/MD
In dotazione con il cambia CD/MD
Geleverd met de CD/MD-wisselaar
BUS AUDIO IN
BUS CONTROL IN
AUDIO OUT
REAR
from car aerial*
von Autoantenne*
a partir de l'antenne de la voiture*
dall'antenna dell'auto*
van een auto-antenne*
RCA pin cord (not supplied)
Cinchkabel (nicht mitgeliefert)
Cordon à broche RCA (non fourni)
Cavo a piedini RCA (non in dotazione)
Tulpstekkersnoer (niet meegeleverd)
AMP REM
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
from the car's speaker connector
vom Lautsprecheranschluss des Fahrzeugs
A partir du connecteur de haut-parleur de la voiture
dal connettore del diffusore dell'auto
van de autoluidsprekerstekker
1 3 5 7
2 4 6 8
from the car's power connector
vom Stromanschluss des Fahrzeugs
A partir du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsstekker
5 7
4 8
See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im "Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le "Schéma de connexion d'alimentation" au verso pour plus de détails.
Per ulteriori informazioni, vedere "Schema dei collegamenti di alimentazione" sulla retrocopertina.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.
* Note for the aerial connecting
If your car aerial is an ISO (International Organisation for Standardisation) type, use the supplied adaptor ⑤ to connect it.
First connect the car aerial to the supplied adaptor, then connect it to the aerial jack of the master unit.
* Hinweis zum Anschließen der Antenne
Wenn Ihre Fahrzeugantenne der ISO-Norm (ISO = International Organization for Standardization - Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters ⑤ an.
Verbinden Sie zuerst die Fahrzeugantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.
* Remarque sur le raccordement de l'antenne
Si votre antenne de voiture est de type ISO (organisation internationale de normalisation), utilisez l'adaptateur fourni ⑤ pour la raccorder.
Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.
* Nota per il collegamento dell'antenna
Se l'antenna dell'auto è di tipo ISO (International Organization Standardization), utilizzare l'adattatore ⑤ in dotazione per collegarla.
Collegare prima l'antenna dell'auto all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.
* Opmerking bij de antenne-aansluiting
Indien uw auto is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de meegeleverde adapter ⑤.
Sluit eerst de auto-antenne aan op de meegeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.
4 Yellow Gelb Jaune Giallo Geel — continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding
7 Red Rot Rouge Rosso Rood — switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
5 Blue Blau Bleu Blu Blauw — power aerial control Motorantennen-Steuerleitung Commande de l'antenne électrique comando dell'antenna elettrica automatische antenne
8 Black Schwarz Noir Nero Zwart — earth Masse masse terra aarding
Positions 1, 2, 3 and 6 do not have pins.
An Position 1, 2, 3 und 6 befinden sich keine Stifte.
Les positions 1, 2, 3 et 6 ne comportent pas de broches.
Le posizioni 1, 2, 3 e 6 non hanno piedini.
De posties 1, 2, 3 en 6 hebben geen pins.
1 Purple Violett Mauve Viola Paars + Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts
– Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts
2 + Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts
– Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts
3 Grey Grau Gris Grigio Grijs + Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts
– Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts
4 + Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts
– Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts
5 White Weiß Blanc Bianco Wit + Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
– Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
6 Green Grün Vert Verde Groen + Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
– Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links
8 + Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
– Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links
Negative polarity positions 2, 4, 6, and 8 have striped cords.
An den negativ gepolten Positionen (2, 4, 6 und 8) befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.


4 1
Orient the release key correctly.
Richten Sie den Löseschlüssel korrekt aus.
Orientez correctement la clé de déblocage.
Orientare la chiavetta di rilascio nel modo corretto.
Plaats de ontgrendelingssleutel op de juiste manier.
2
Face the hook inwards.
Der Haken muss nach innen weisen.
Tournez le crochet vers l'intérieur.
Con il gancetto rivolto verso l'interno.
Het haakje moet naar binnen wijzen.





Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment
Adjust the mounting angle to less than 20°.

Removing the protection collar and the bracket (4)

Before installing the unit, remove the protection collar ④ and the bracket ① from the unit.

1 Remove the protection collar ④.
❶ Engage the release keys ⑦ together with the protection collar ④.
❷ Pull out the release keys ⑦ to remove the protection collar ④.

2 Remove the bracket ①.
❶ Insert both release keys ⑦ together between the unit and the bracket until they click.
❷ Pull down the bracket ①, then pull up the unit to separate.

Mounting example (5)

Installation in the dashboard

Notes
- *Bend these claws outward for a tight fit, if necessary (5-2).*
- *Make sure that the 4 catches on the protection collar ④ are properly engaged in the slots of the unit (5-3).*

How to detach and attach the front panel (6)

Before installing the unit, detach the front panel.

6-A To detach
Before detaching the front panel, be sure to press (OFF). Press (RELEASE), then slide the front panel a little to the left, and pull it off towards you.

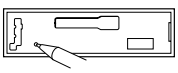
6-B To attach
Attach part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push the left side into position until it clicks.

Warning when installing in a car without ACC (accessory) position on the ignition key switch

Be sure to press (OFF) on the unit for two seconds to turn off the clock display after turning off the engine.
When you press (OFF) only momentarily, the clock display does not turn off and this causes battery wear.

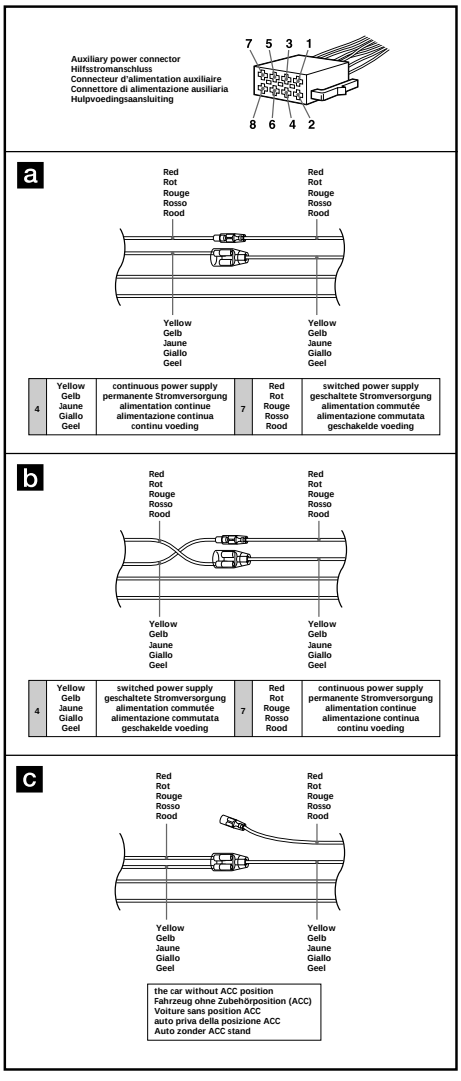
RESET button

When the installation and connections are completed, be sure to press the RESET button with a ballpoint pen, etc., after detaching the front panel.



Power connection diagram

Auxiliary power connector may vary depending on the car. Check your car's auxiliary power connector diagram to make sure the connections match correctly. There are three basic types (illustrated below). You may need to switch the positions of the red and yellow leads in the car stereo's power connecting cord.
After matching the connections and switched power supply leads correctly, connect the unit to the car's power supply. If you have any questions and problems connecting your unit that are not covered in this manual, please consult the car dealer.


Auxiliary power connector
Hilfstromanschluss
Connecteur d'alimentation auxiliaire
Connettore di alimentazione ausiliaria
Hulpvoedingsaansluiting
7 5 3 1
8 6 4 2
a
Red Rot Rouge Rosso Rood
Yellow Gelb Jaune Giallo Geel
4 Yellow Gelb Jaune Giallo Geel continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding
7 Red Rot Rouge Rosso Rood switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
b
Red Rot Rouge Rosso Rood
Yellow Gelb Jaune Giallo Geel
4 Yellow Gelb Jaune Giallo Geel switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding
7 Red Rot Rouge Rosso Rood continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding
c
Red Rot Rouge Rosso Rood
Yellow Gelb Jaune Giallo Geel
the car without ACC position
Fahrzeug ohne Zubehörposition (ACC)
Voiture sans position ACC
auto priva della posizione ACC
Auto zonder ACC stand

SECTION 2
DISASSEMBLY

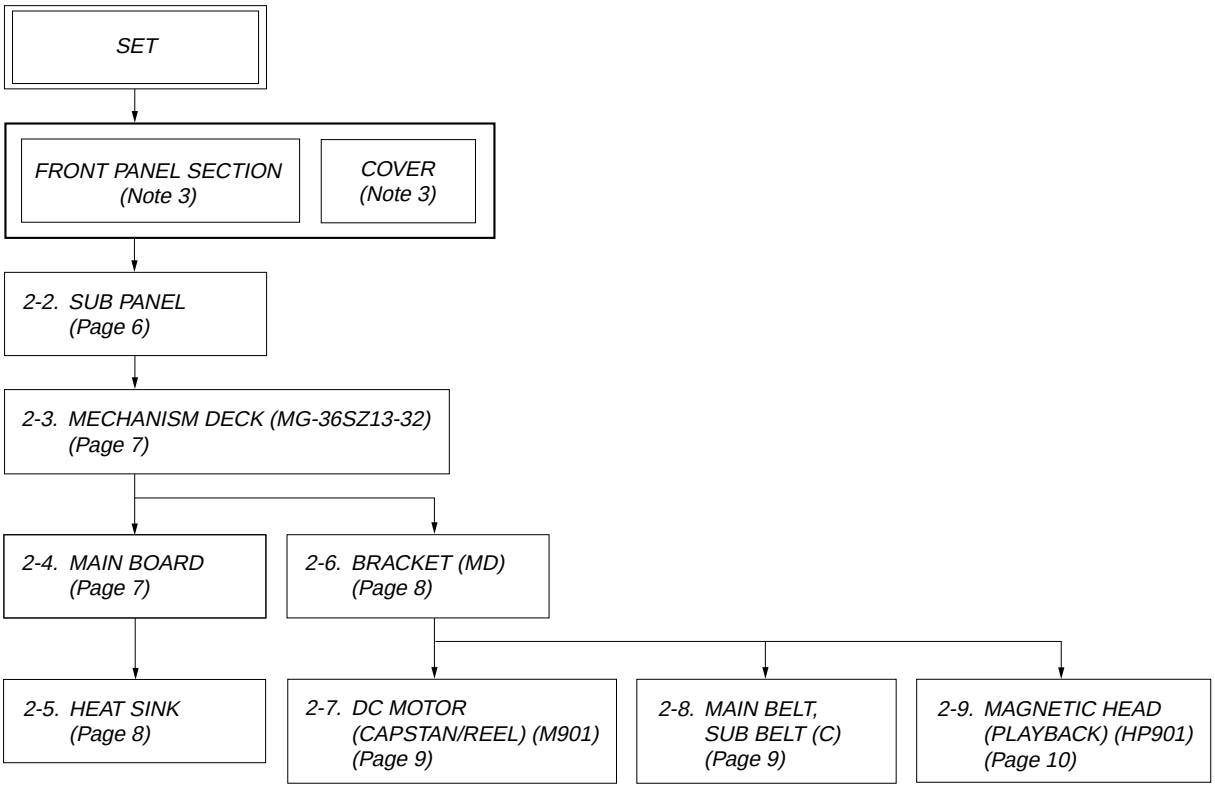
• This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

Note 1: *The process described in* ▣ *can be performed in any order.*

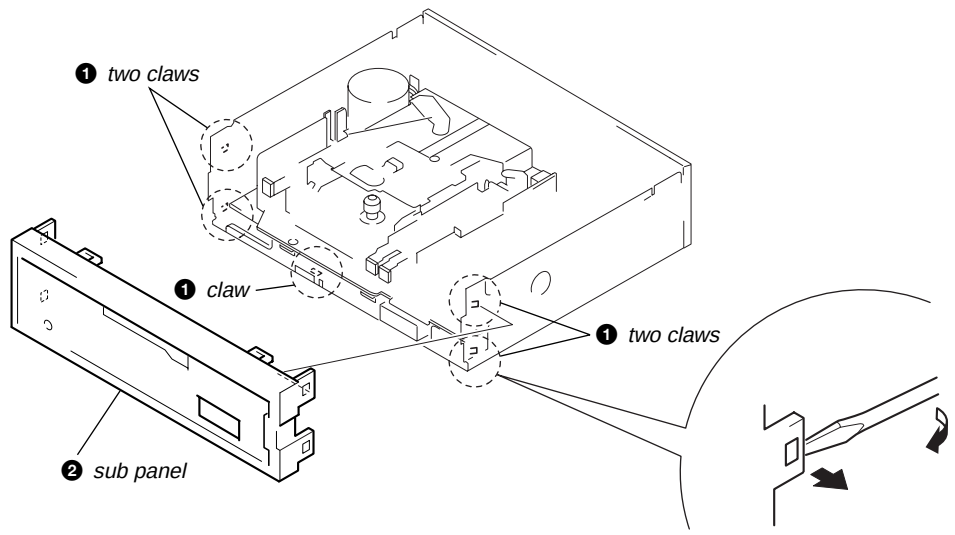
Note 2: *Without completing the process described in* ▣*, the next process can not be performed.*

Note 3: *Illustration of disassembly is omitted.*

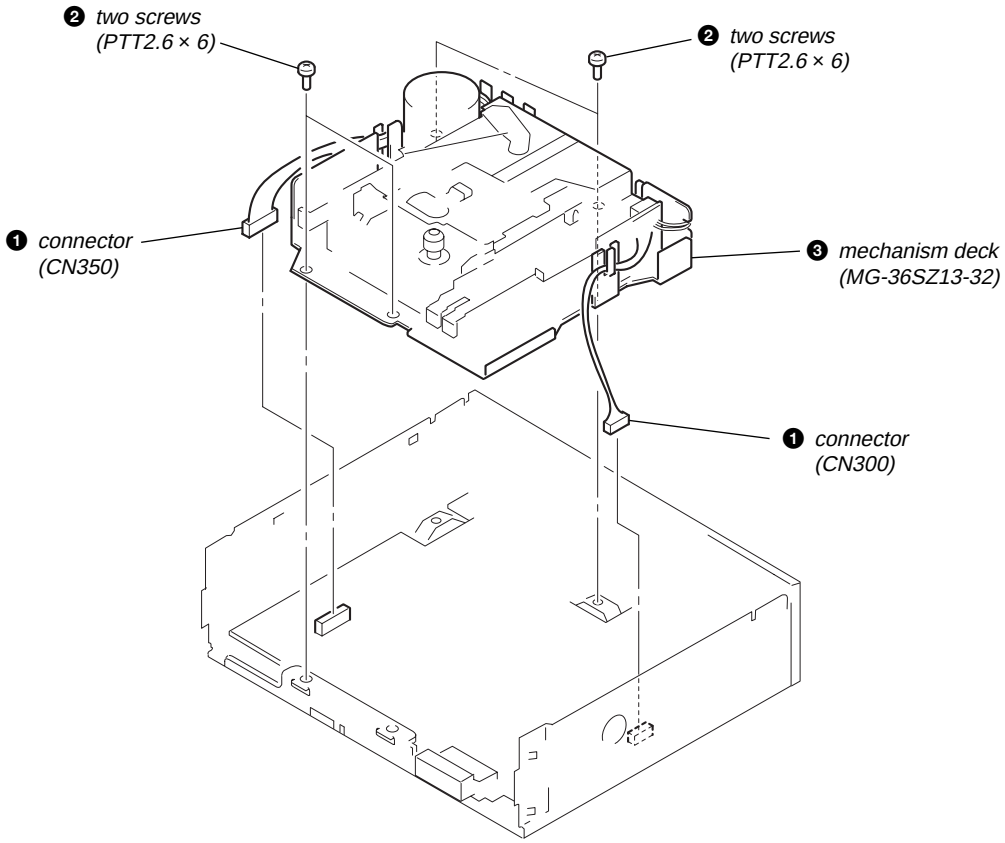

SET
FRONT PANEL SECTION (Note 3)
COVER (Note 3)
2-2. SUB PANEL (Page 6)
2-3. MECHANISM DECK (MG-36SZ13-32) (Page 7)
2-4. MAIN BOARD (Page 7)
2-6. BRACKET (MD) (Page 8)
2-5. HEAT SINK (Page 8)
2-7. DC MOTOR (CAPSTAN/REEL) (M901) (Page 9)
2-8. MAIN BELT, SUB BELT (C) (Page 9)
2-9. MAGNETIC HEAD (PLAYBACK) (HP901) (Page 10)

Note: Follow the disassembly procedure in the numerical order given.

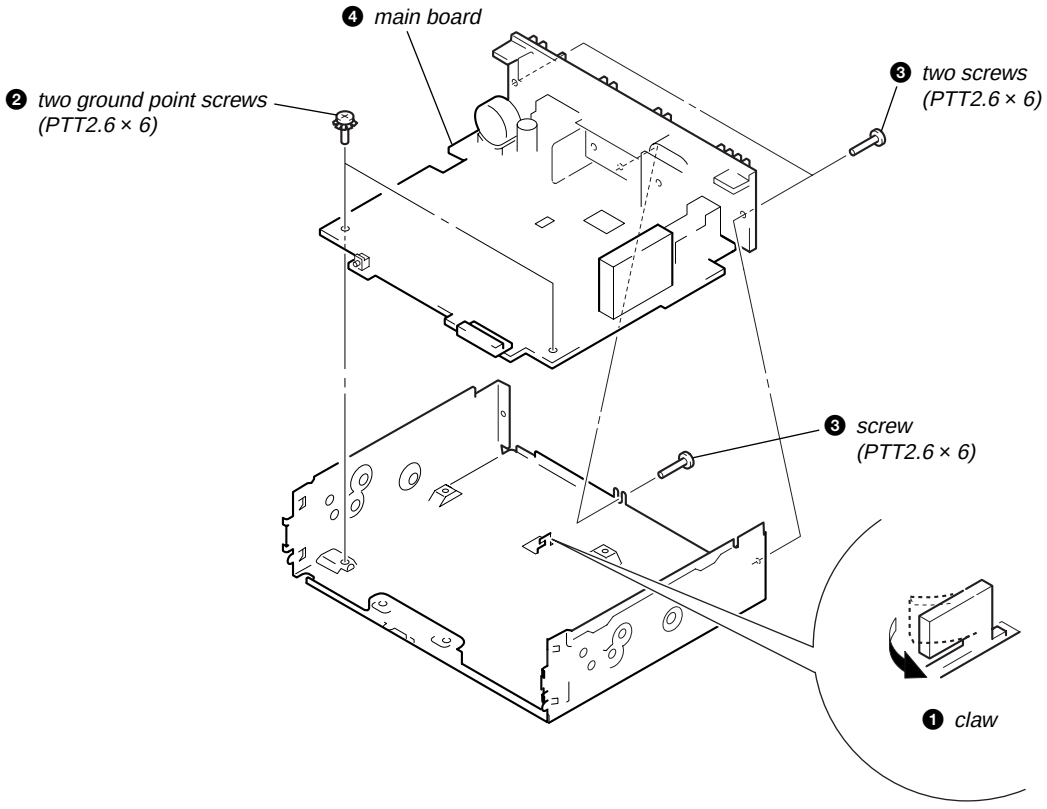
2-2. SUB PANEL



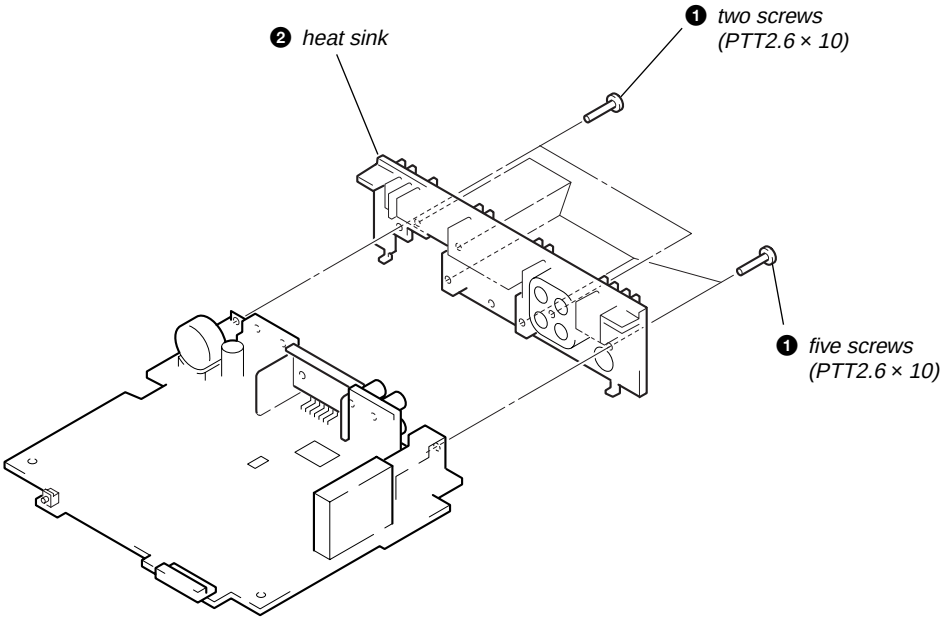
2-3. MECHANISM DECK (MG-36SZ13-32)



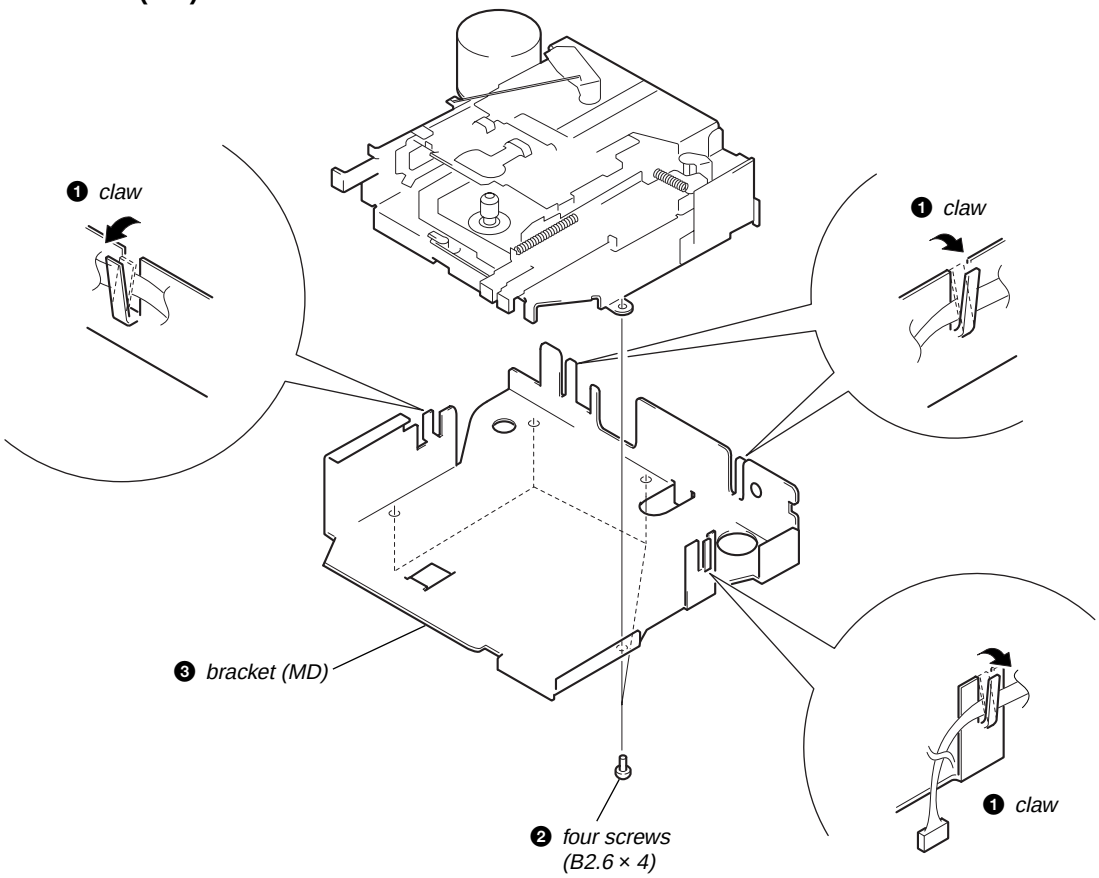
2-4. MAIN BOARD



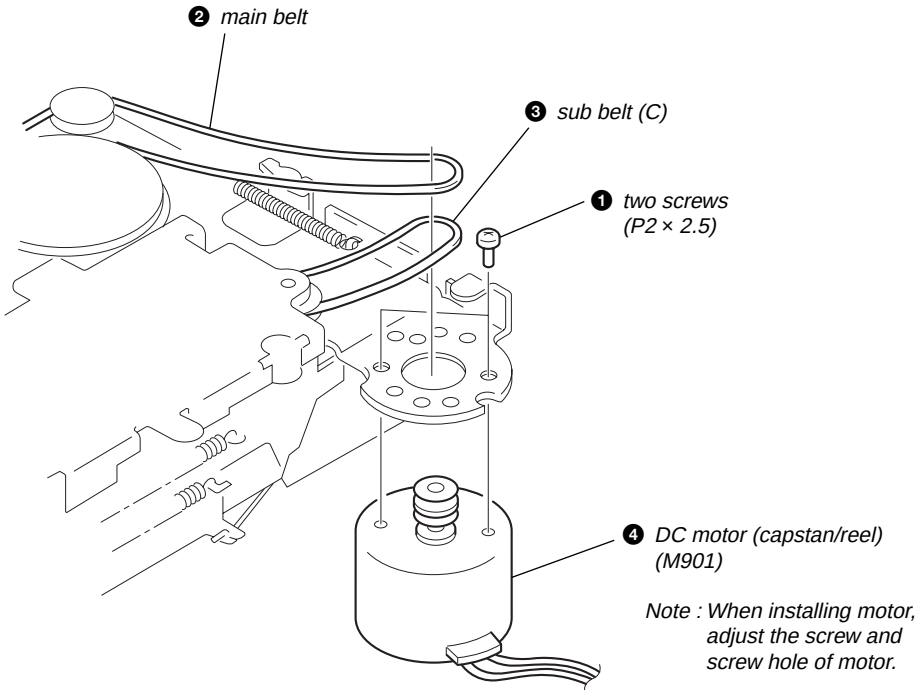
2-5. HEAT SINK



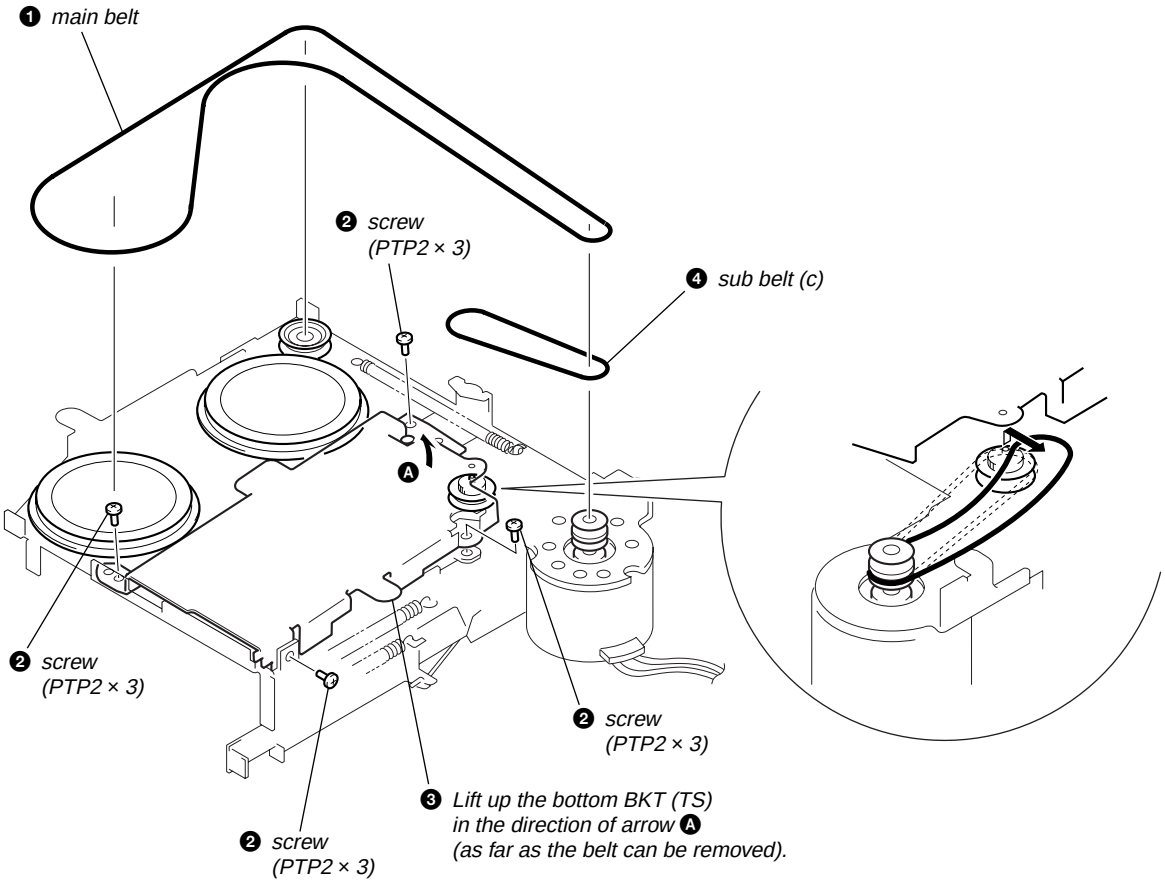
2-6. BRACKET (MD)



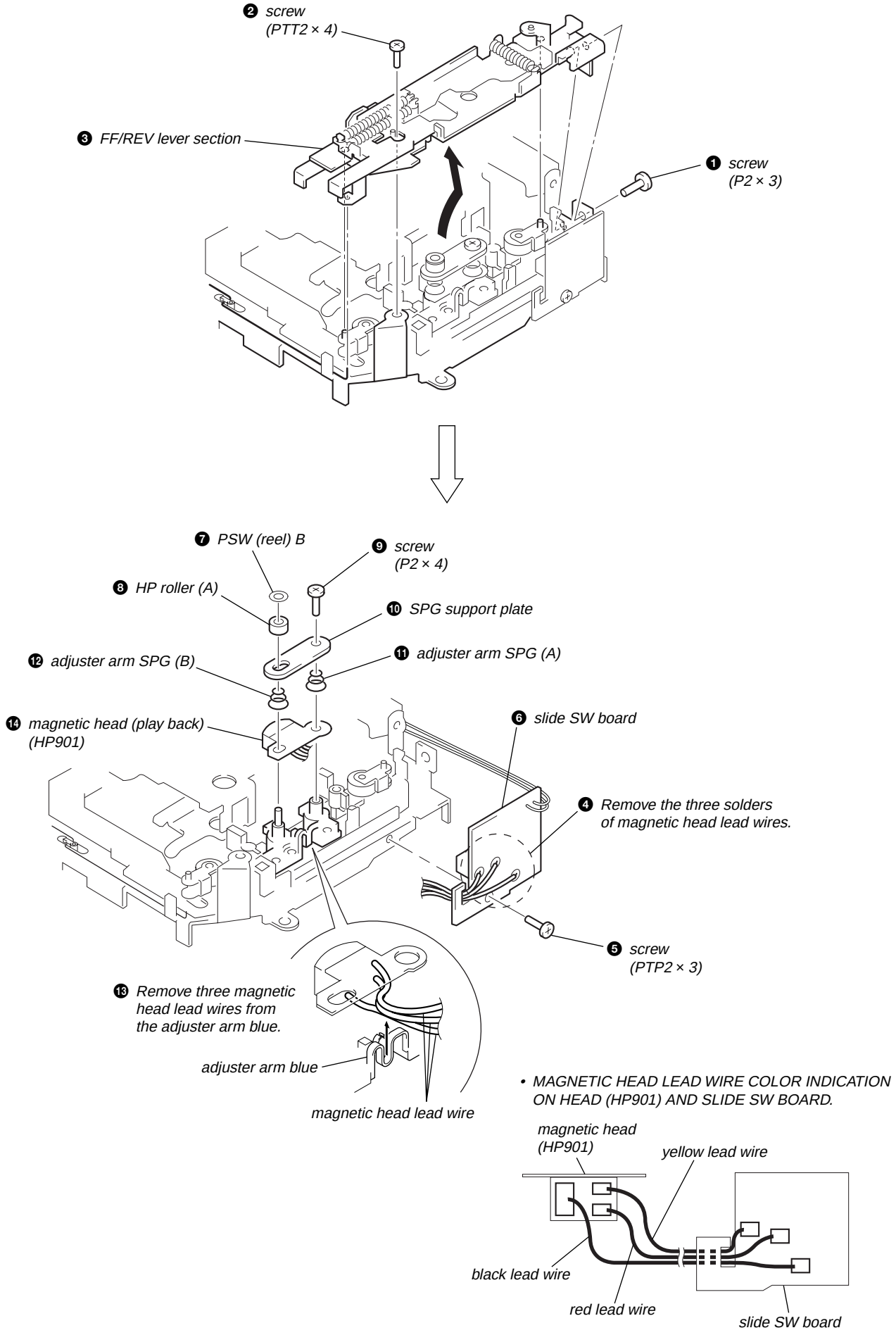
2-7. DC MOTOR (CAPSTAN/REEL) (M901)



2-8. MAIN BELT, SUB BELT (C)



2-9. MAGNETIC HEAD (PLAYBACK) (HP901)



SECTION 3
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   idler
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. The adjustments should be performed with the power supply voltage (14.4 V) unless otherwise noted.

Note: With this set, it is not necessary to apply suitable locking compound to the parts after the azimuth adjustment.

• TORQUE MEASUREMENT

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	2.46 – 5.39 mN•m (25 – 55 g•cm) (0.35 – 0.76 oz•inch)
Forward Back Tension	CQ-102C	0.15 – 0.39 mN•m (1.5 – 4 g•cm) (0.02 – 0.06 oz•inch)
Reverse	CQ-102RC	2.46 – 5.39 mN•m (25 – 55 g•cm) (0.35 – 0.76 oz•inch)
Reverse Back Tension	CQ-102RC	0.15– 0.39 mN•m (1.5 – 4 g•cm) (0.02 – 0.06 oz•inch)
FF, REW	CQ-201B	4.91 – 14.70 mN•m (50 – 150 g•cm) (0.69 – 2.08 oz•inch)

• TAPE TENSION MEASUREMENT

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 5.89 mN•m (more than 60 g) (more than 2.12 oz)
Reverse	CQ-403R	

SECTION 4
ELECTRICAL ADJUSTMENTS

TAPE DECK SECTION | 0 dB= 0.775 V

1. The adjustments should be performed in the order given in this service manual.
2. The adjustments should be performed for both L-CH and R-CH.

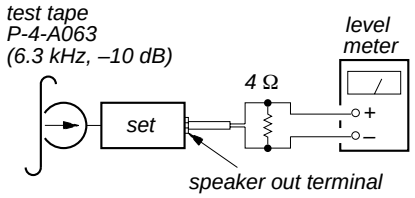
TEST TAPE

Type	Signal	Used for
P-4-A063	6.3 kHz, –10 dB	head azimuth adjustment
WS-48A	3 kHz, 0 dB	tape speed adjustment

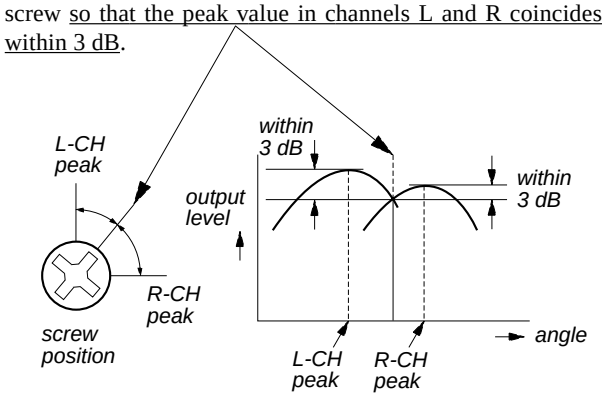
PB HEAD AZIMUTH ADJUSTMENT

Procedure:

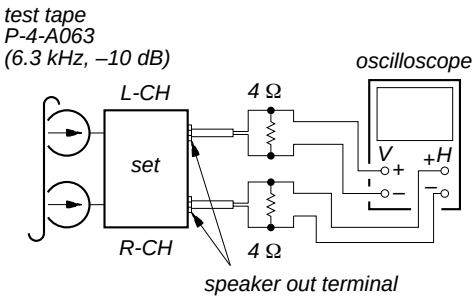
1. Put the set into the FWD PB mode.

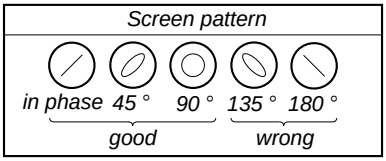


2. Turn the screw and check the output peak value. Adjust the screw so that the peak value in channels L and R coincides within 3 dB.



3. Check the phase in the FWD PB mode.

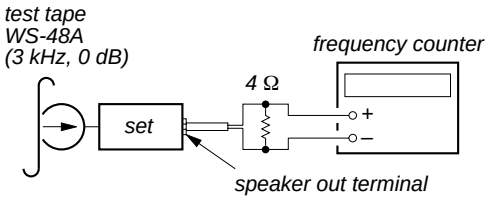




4. Repeat the above adjustment for the REV PB mode.
5. Check that output level difference between FWD PB mode and REV PB mode is within 4 dB.

Adjustment Location: PB head (See page 12)

TAPE SPEED ADJUSTMENT
Setting:



Procedure:
1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the frequency counter becomes in 3,015 Hz.

Specified Value: 2,940 to 3,090 Hz

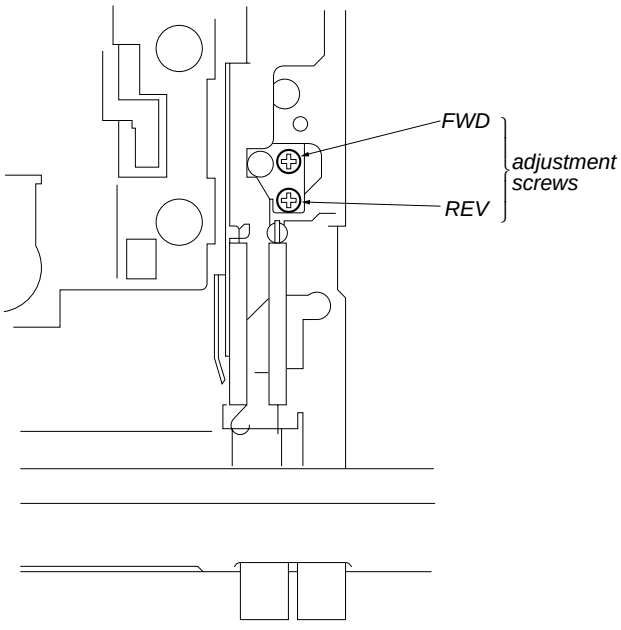
Adjustment Location: DC motor

TUNER SECTION

Tuner section adjustments are done automatically in this set.

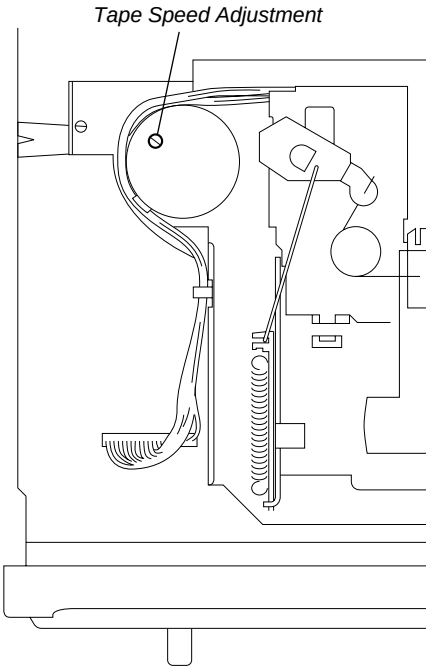
Adjustment Location: PB head

– Set Upper View –



Adjustment Location: DC motor

– Set Upper View –



SECTION 5
DIAGRAMS

5-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ● : Through hole.
- ▬ : Pattern from the side which enables seeing.
- – – – – : Carbon pattern.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

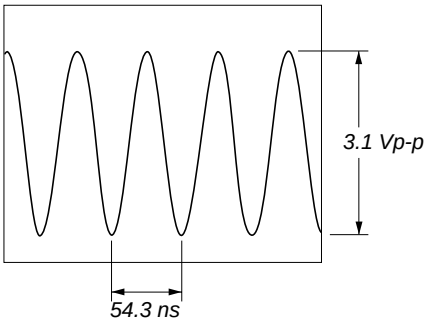
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM (MW/LW)
  ⟨⟨ ⟩⟩ : TAPE PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : AM (MW/LW)
  ⇨ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN

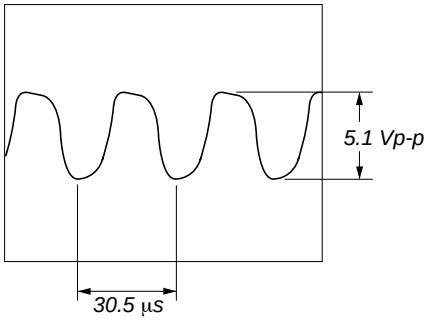
• **Waveforms**

– MAIN Board –

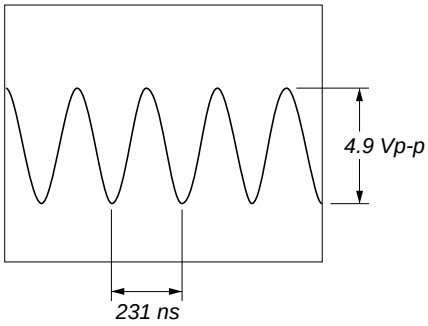
❶ IC1 ⑫ (OSC2)



❷ IC1 ⑯ (XO)

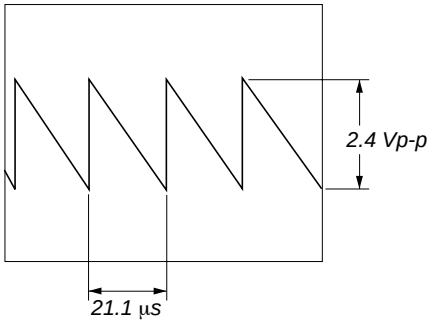


❸ IC200 ④ (OSCO)

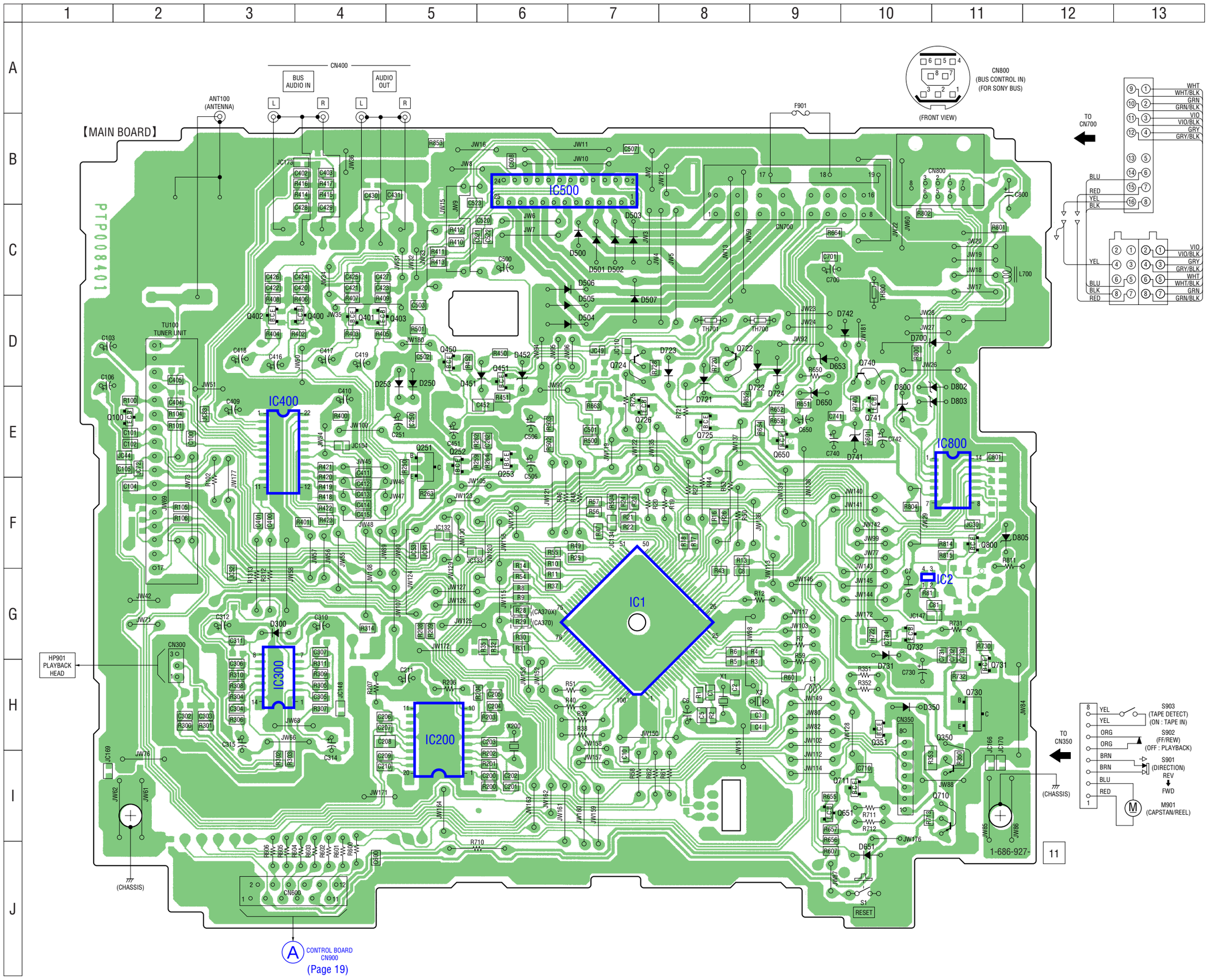


– CONTROL Board –

❹ IC900 ⑬ (OSC)



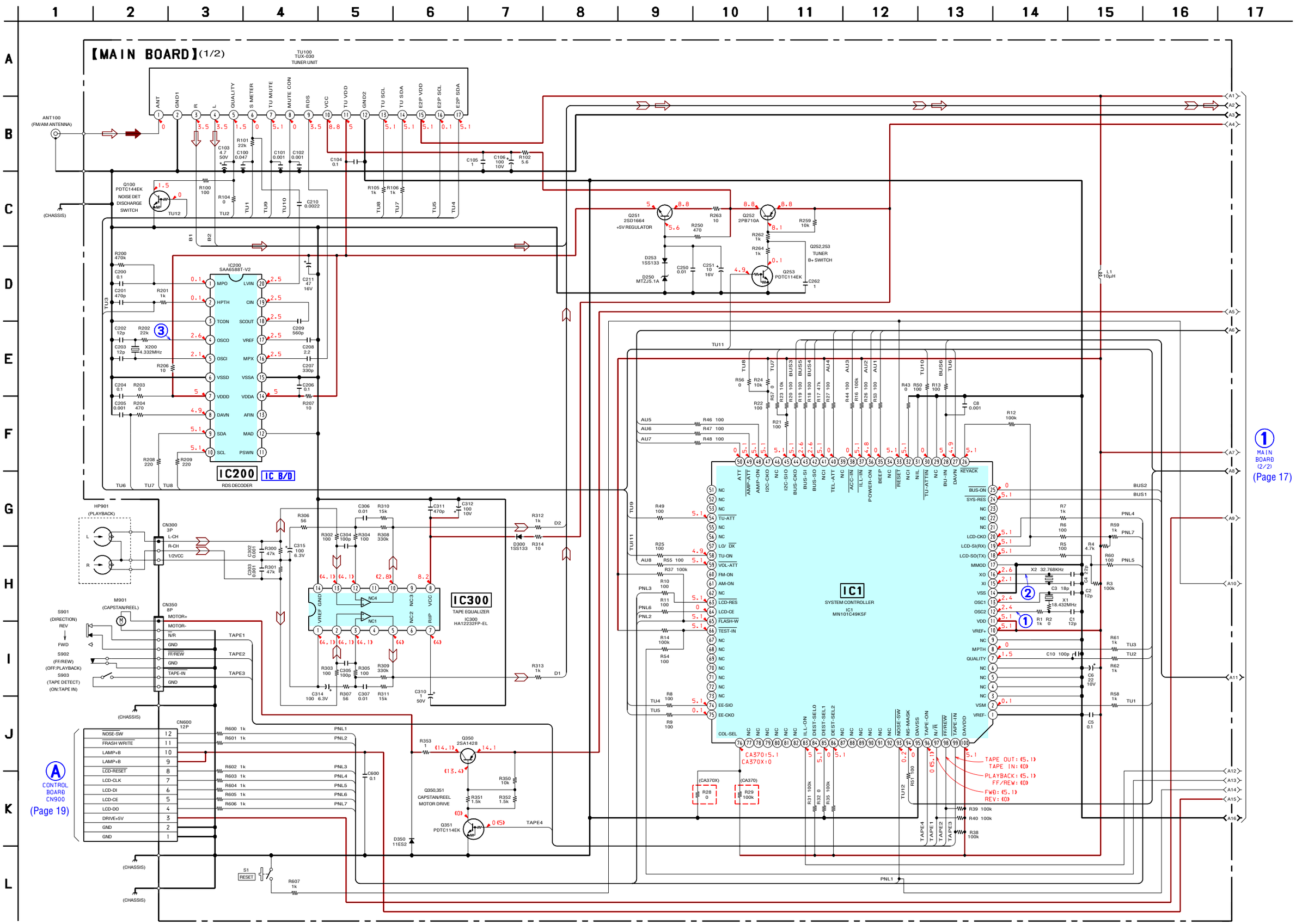
5-2. PRINTED WIRING BOARD – MAIN Board –



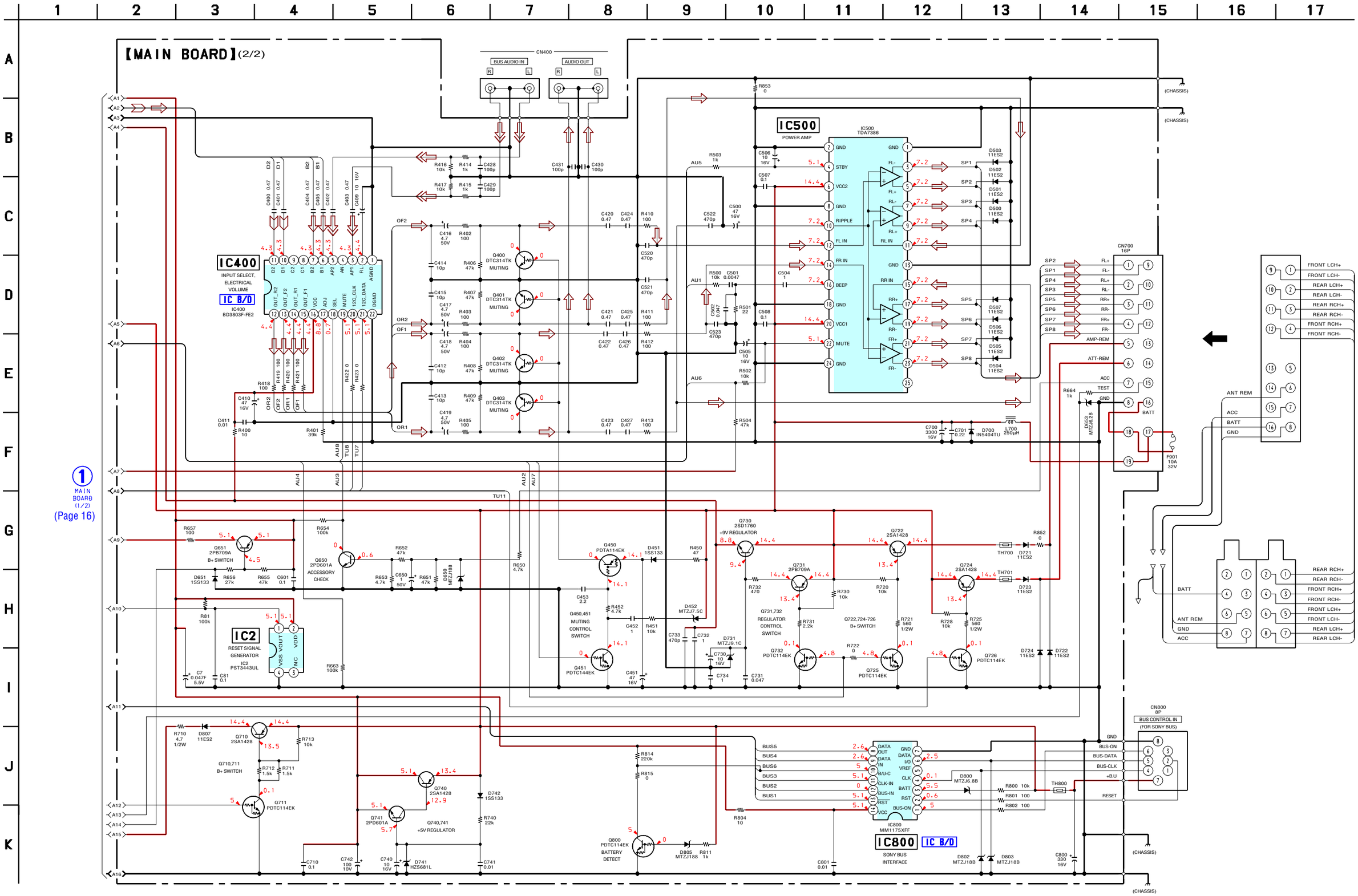
- **Semiconductor Location**

Ref. No.	Location
D250	D-5
D253	D-5
D300	G-3
D350	H-10
D451	D-6
D452	D-6
D500	C-7
D501	C-7
D502	C-7
D503	C-7
D504	D-7
D505	D-7
D506	C-7
D507	D-7
D650	E-9
D651	J-10
D653	D-9
D700	D-10
D721	D-8
D722	D-9
D723	D-8
D724	D-9
D731	H-11
D740	D-10
D741	E-10
D800	E-10
D802	E-11
D803	E-11
D805	F-11
IC1	G-7
IC2	G-11
IC200	H-5
IC300	H-3
IC400	E-3
IC500	B-6
IC800	E-11
Q100	E-2
Q251	E-5
Q252	E-5
Q253	E-6
Q350	I-11
Q351	H-10
Q400	D-4
Q401	D-4
Q402	D-3
Q403	D-4
Q450	D-5
Q451	D-6
Q650	E-9
Q651	I-9
Q710	I-11
Q711	I-10
Q722	D-8
Q724	D-7
Q725	E-8
Q726	E-7
Q730	H-11
Q731	G-11
Q732	G-10
Q740	D-10
Q741	E-10
Q800	F-11

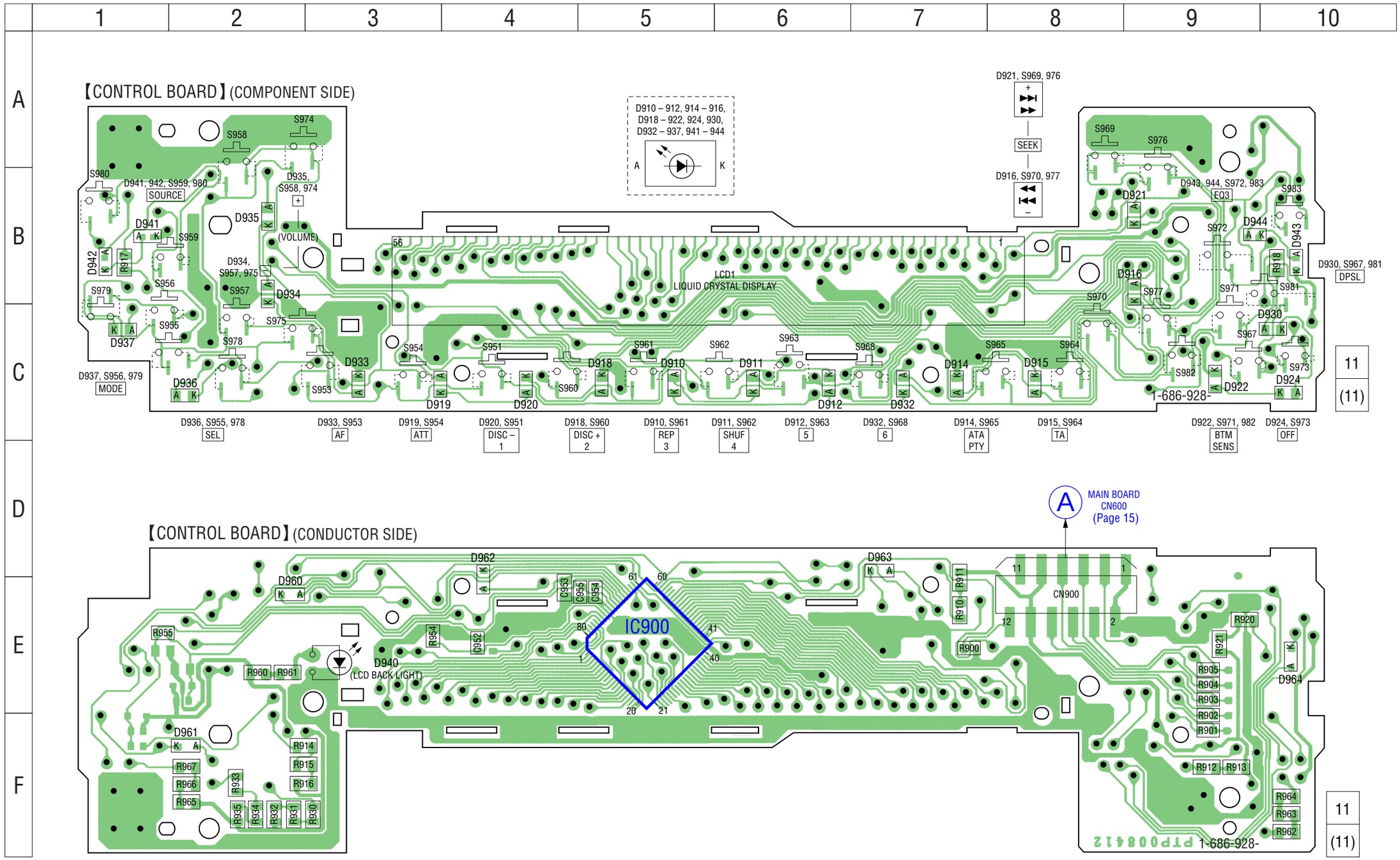
5-3. SCHEMATIC DIAGRAM – MAIN Board (1/2) – • See page 14 for Waveforms. • See page 20 for IC Block Diagram.


【MAIN BOARD】(1/2)
TU100 TUX-030 TUNER UNIT
ANT GND R L QUALITY S METER TU MUTE MUTE CON RDS VCC TU VDD GND2 TU SCL TU SDA E2P VDD E2P SCL E2P SDA
ANT100 (FM/AM ANTENNA)
(CHASSIS)
Q100 PDTC144EK NOISE DET DISCHARGE SWITCH
TU12
IC200 SAA6588T-V2
MPO HPTH TCON OSCO OSCI VSSD VDDD DAVN SDA SCL LVIN CIN SCOUT VREF MPX VSSA VDDA AFIN MAD PSWN
X200 4.332MHz
IC200 IC B/D RDS DECODER
HP901 (PLAYBACK)
CN300 3P L-CH R-CH 1/2VCC
M901 (CAPSTAN/REEL)
S901 (DIRECTION) REV FWD
S902 (FF/REW) (OFF:PLAYBACK)
S903 (TAPE DETECT) (ON:TAPE IN)
CN350 8P MOTOR+ MOTOR- N/R GND FF/REW GND TAPE-IN GND
TAPE1 TAPE2 TAPE3
IC300 TAPE EQUALIZER IC300 HA12232FP-EL
VREF GND NC4 NC1 NC3 NC2 RIP VCC
Q350 2SA1428
Q350,351 CAPSTAN/REEL MOTOR DRIVE
Q351 PDTC114EK
D350 11ES2
S1 RESET
CN600 12P
NOSE-SW FRASH WRITE LAMP+B LAMP+B LCD-RESET LCD-CLK LCD-DI LCD-CE LCD-DO DRIVE+5V GND GND
A CONTROL BOARD CN900 (Page 19)
Q251 2SD1664 +5V REGULATOR
Q252 2PB710A
Q252,253 TUNER B+ SWITCH
Q253 PDTC114EK
D253 1SS133
D250 MTZJ5.1A
D300 1SS133
D1
D2
L1 10µH
TU11
IC1 SYSTEM CONTROLLER IC1 MN101C49KSF
ATT AMP-ATT AMP-ON I2C-CKO NC I2C-SIO BUS-CKO BUS-SI BUS-SO NCI TEL-ATT NC ACC-IN ILL-IN POWER-ON BEEP NC RESET NCI NIL TU-ATTIN NC BU-IN DAVN KEYACK
BUS-ON SYS-RES LCD-CKO LCD-SI(RX) LCD-SO(TX) MMOD XO XI VSS OSC1 OSC2 VDD VREF+ MPTH QUALITY VSM VREF-
NC TU-ATT LO/DX TU-ON VOL-ATT FM-ON AM-ON LCD-RES LCD-CE FLASH-W TEST-IN EE-SIO EE-CKO COL-SEL
NOSE-SW NS-MASK DAVSS TAPE-ON N/R FF/REW TAPE-IN DAVDD
CA370:5.1 CA370X:0
(CA370X) (CA370)
TAPE OUT: (5.1) TAPE IN: (0) PLAYBACK: (5.1) FF/REW: (0) FWD: (5.1) REV: (0)
X2 32.768KHz X1 18.432MHz
1 MAIN BOARD (2/2) (Page 17)
2

5-4. SCHEMATIC DIAGRAM – MAIN Board (2/2) – • See page 20 for IC Block Diagram.



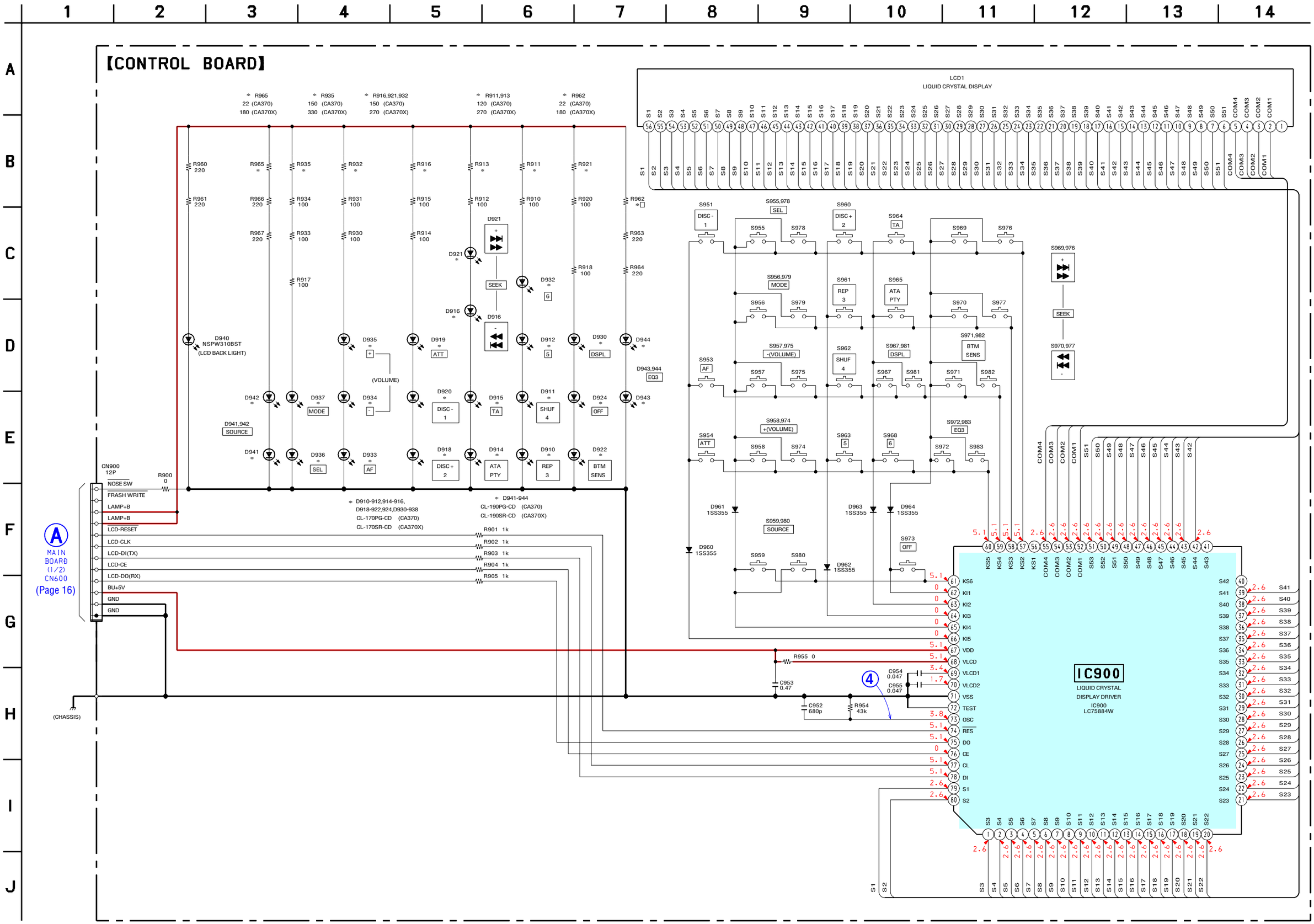
5-5. PRINTED WIRING BOARD – CONTROL Board –



- **Semiconductor Location**

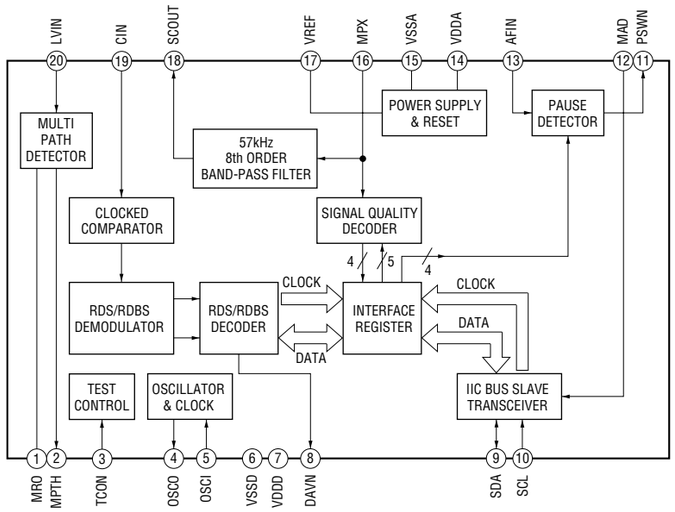
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D910	C-5	D924	C-10	D943	B-10
D911	C-6	D930	C-10	D944	B-9
D912	C-6	D932	C-7	D960	E-2
D914	C-7	D933	C-3	D961	F-2
D915	C-8	D934	B-2	D962	D-4
D916	B-9	D935	B-2	D963	D-7
D918	C-5	D936	C-2	D964	E-10
D919	C-3	D937	C-1		
D920	C-4	D940	E-3	IC900	E-5
D921	B-9	D941	B-1		
D922	C-9	D942	B-1		

5-6. SCHEMATIC DIAGRAM – CONTROL Board – • See page 14 for Waveform.

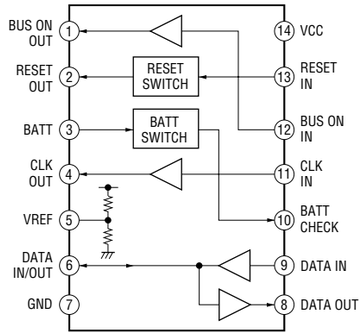


• **IC Block Diagrams**
– MAIN Board –

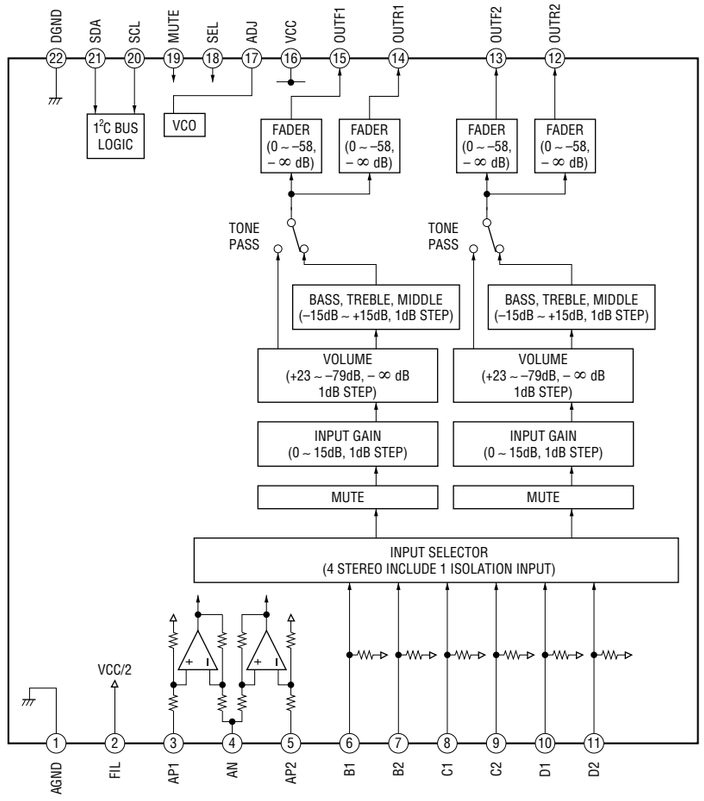
IC200 SAA6588T/V2-518



IC800 MM1175XFF



IC400 BD3803F-FE2



5-7. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC1 MN101C49KSF (SYSTEM CONTROLLER)

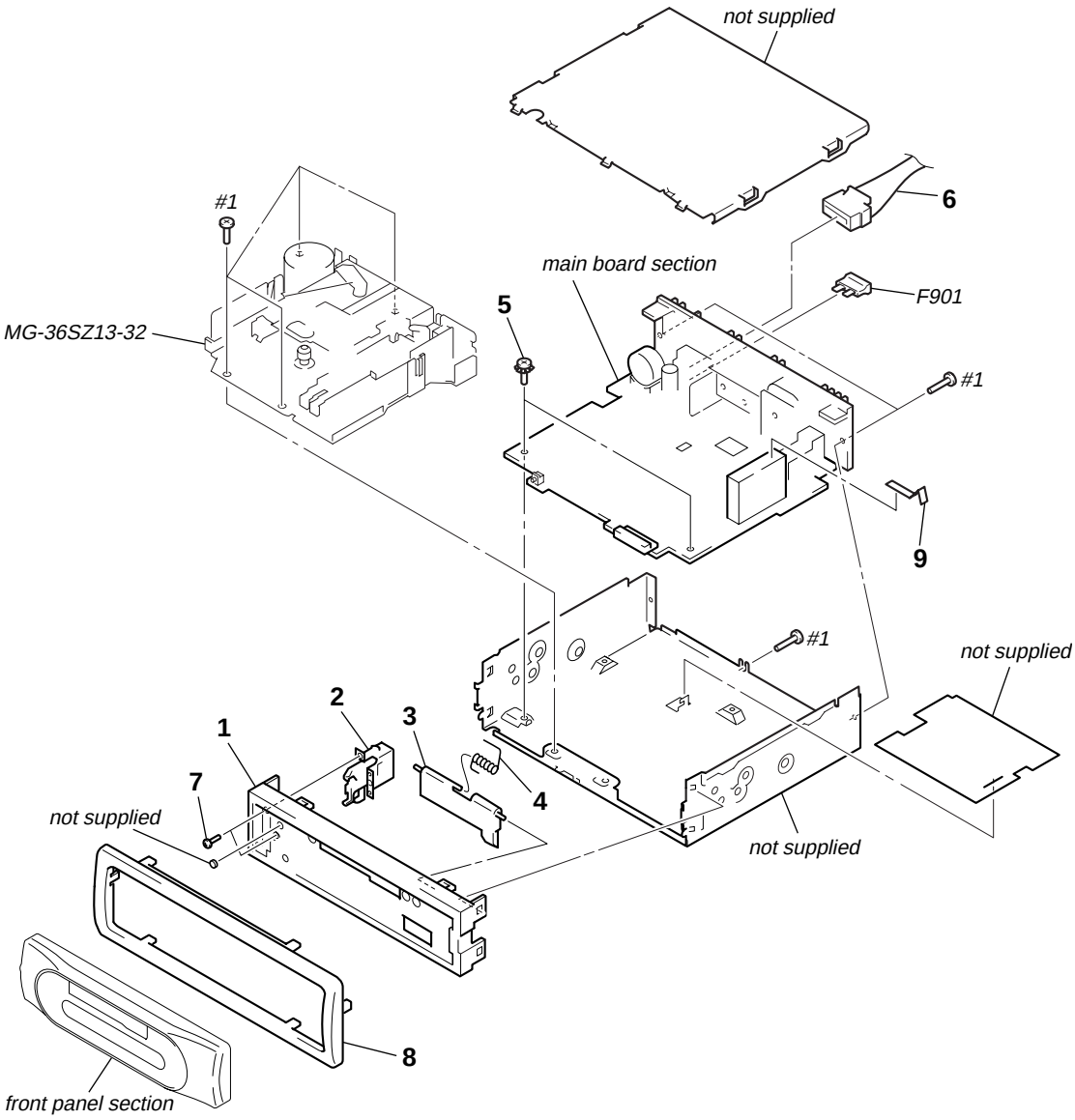
Pin No.	Pin Name	I/O	Description
1	VREF –	—	Reference voltage (0V) terminal (for A/D converter)
2	VSM	I	FM and AM signal meter voltage detection input from the tuner unit (A/D input)
3 to 6	NC	I	Not used
7	QUALITY	I	Noise level detection signal input from the tuner unit (A/D input)
8	MPTH	I	Multi-path detection signal input from the RDS decoder (A/D input)
9	NC	I	Not used
10	VREF +	—	Reference voltage (+5V) terminal (for A/D converter)
11	VDD	—	Power supply terminal (+5V)
12	OSC2	O	Main system clock output terminal (18.432 MHz)
13	OSC1	I	Main system clock input terminal (18.432 MHz)
14	VSS	—	Ground terminal
15	XI	I	Sub system clock input terminal (32.768 kHz)
16	XO	O	Sub system clock output terminal (32.768 kHz)
17	MMOD	I	Setting terminal for the single chip mode “L”: single chip (fixed at “L” in this set)
18	LCD-SO (TX)	O	LCD serial data output to the liquid crystal display driver
19	LCD-SI (RX)	I	LCD serial data input from the liquid crystal display driver
20	LCD-CKO	O	LCD serial transfer clock signal output to the liquid crystal display driver
21 to 23	NC	O	Not used
24	$\overline{\text{SYS-RES}}$	O	System reset signal output to the SONY bus interface “L”: reset
25	$\overline{\text{BUS-ON}}$	O	Bus interface control signal output to the SONY bus interface “L”: uni-link on
26	$\overline{\text{KEYACK}}$	I	Key acknowledge signal detection input from the liquid crystal display driver
27	DAVN	I	RDS serial data request signal input terminal
28	BU-IN	I	Battery detection signal input from the bus interface and battery detect circuit “L” is input at low voltage
29	NC	I	Not used
30	$\overline{\text{TU-ATTIN}}$	I	Tuner muting on/off control signal input from the tuner unit “L”: muting on
31, 32	NC	I	Not used
33	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator and reset switch “L”: reset “L”is input for several 100 msec after power on, then it changes to “H”
34	NC	O	Not used
35	BEEP	O	Beep sound drive signal output to the power amplifier “H”: beep on
36	POWER-ON	O	Main system power supply on/off control signal output “H”: power on
37	$\overline{\text{ILL-IN}}$	I	Illuminate line detection signal input terminal “L”: ill on Not used
38	$\overline{\text{ACC-IN}}$	I	Accessory detection signal input “L”: accessory on “H” is input for several 200 msec after accessory on, then it changes to “L”
39	NC	O	Not used
40	TEL-ATT	I	Telephone muting signal input terminal At input of “H”, the signal is attenuated by –20 dB Not used
41	NCI	I	Not used
42	BUS-SO	O	Serial data output to the SONY bus interface
43	BUS-SI	I	Serial data input from the SONY bus interface
44	BUS-CKO	O	Serial data transfer clock signal output to the SONY bus interface
45	I2C-SIO	I/O	Two-way data bus with the tuner unit, RDS decoder and electrical volume
46	NC	O	Not used
47	I2C-CKO	O	Serial data transfer clock signal output to the tuner unit, RDS decoder and electrical volume
48	AMP-ON	O	Standby on/off control signal output to the power amplifier “L”: standby mode, “H”: amplifier on
49	$\overline{\text{AMP-ATT}}$	O	Muting on/off control signal output to the power amplifier “L”: muting on

Pin No.	Pin Name	I/O	Description
50	ATT	O	Audio line muting on/off control signal output "H": muting on
51 to 53	NC	O	Not used
54	$\overline{\text{TU-ATT}}$	O	Tuner muting on/off control signal output to the tuner unit "L": muting on
55, 56	NC	O	Not used
57	LO/$\overline{\text{DX}}$	O	Local/DX selection signal output terminal "L": DX, "H": local Not used
58	TU-ON	O	Tuner system power supply on/off control signal output "H": tuner power on
59	$\overline{\text{VOL-ATT}}$	O	Electrical volume muting on/off control signal output to the electrical volume "L":muting on
60	FM-ON	O	FM system power supply on/off control signal output terminal "H": FM power on Not used
61	AM-ON	O	AM system power supply on/off control signal output terminal "H": AM power on Not used
62	NC	O	Not used
63	$\overline{\text{LCD-RES}}$	O	LCD reset signal output to the liquid crystal display driver "L": reset
64	LCD-CE	O	Chip enable signal output to the liquid crystal display driver "H" active
65	$\overline{\text{FLASH-W}}$	I	Internal flash memory data write mode detection signal input "L": data write mode Normally: fixed at "H"
66	$\overline{\text{TEST-IN}}$	I	Setting terminal for the test mode "L": test mode Normally: fixed at "H"
67 to 73	NC	O	Not used
74	EE-SIO	I/O	Two-way data bus with the tuner unit
75	EE-CKO	O	Serial data transfer clock signal output to the tuner unit
76	COL-SEL	I	Illumination color selection signal input "L": amber illumination "H": green illumination (XR-CA370:fixed at "H" in this set, XR-CA370X:fixed at "L" in this set)
77 to 82	NC	O	Not used
83	ILL-ON	O	Power on/off control signal output of the illumination LED and LCD back light "H": power on
84	DEST-SEL0	I	Destination setting terminal (fixed at "H" in this set)
85	DEST-SEL1	I	Destination setting terminal (fixed at "L" in this set)
86	DEST-SEL2	I	Destination setting terminal (fixed at "H" in this set)
87 to 92	NC	O	Not used
93	$\overline{\text{NOSE-SW}}$	I	Front panel block remove/attach detection signal input "L": front panel is attached
94	NS-MASK	O	Noise detection port mask output terminal "H" active
95	DAVSS	—	Ground terminal (for D/A converter)
96	TAPE-ON	O	Capstan/reel motor drive signal output "H": motor on
97	N/$\overline{\text{R}}$	I	Tape direction switch input terminal "L": reverse direction, "H": forward direction
98	$\overline{\text{FF/REW}}$	I	FF/REW detection switch input terminal "L": FF/REW mode, "H": PLAYBACK mode
99	$\overline{\text{TAPE-IN}}$	I	Tape in detection switch input terminal "L": tape in
100	DAVDD	—	Power supply terminal (+5V) (for D/A converter)

SECTION 6
EXPLODED VIEWS

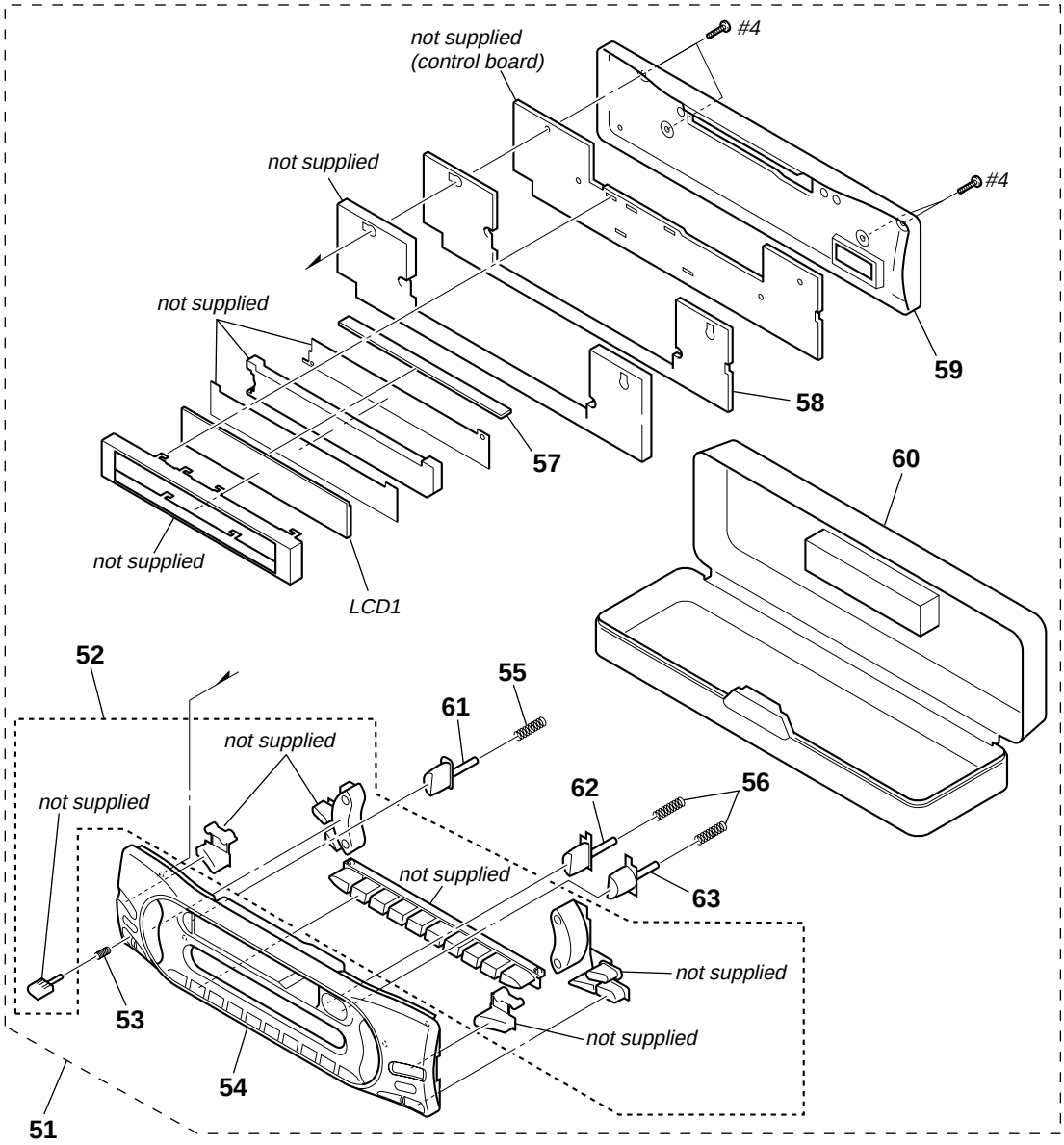
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.

6-1. GENERAL SECTION



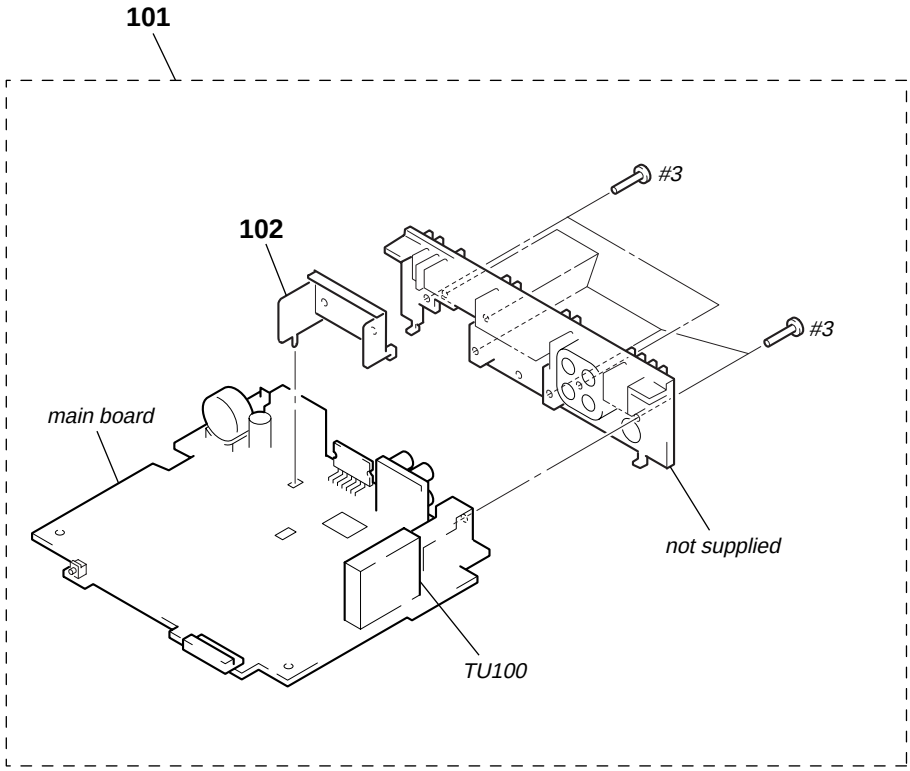
Ref. No.	Part No.	Description	Remark
1	3-246-741-01	PANEL, SUB	
2	X-3380-594-6	LOCK ASSY (S)	
3	3-041-581-11	DOOR, CASSETTE	
4	3-044-125-01	SPRING, TORSION	
5	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
6	1-757-662-11	CORD (WITH CONNECTOR) (ISO) (POWER)	
7	3-042-244-01	SCREW (T)	
8	3-246-758-01	COLLAR	
9	3-937-650-01	PLATE (C), GROUND	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-3315-980-A	PANEL ASSY, FRONT (CA370X)	
51	A-3337-220-A	PANEL ASSY, FRONT (CA370)	
52	X-3383-133-1	BUTTON KIT (SVX) ASSY	
53	3-231-816-01	SPRING (RELEASE)	
54	3-246-762-01	PANEL, FRONT (CA370X)	
54	3-246-762-11	PANEL, FRONT (CA370)	
55	3-029-327-01	SPRING (EJECT)	
56	3-375-372-01	SPRING (F/R)	
57	1-780-021-11	CONDUCTIVE BOARD, CONNECTION	
58	1-786-465-11	SWITCH, SHEET	
59	3-246-739-01	PANEL, FRONT BACK	
60	X-3378-490-2	CASE (PANEL) ASSY	
61	3-246-744-01	BUTTON (EJECT) (⏏)	
62	3-246-743-01	BUTTON (REW) (◀◀)	
63	3-246-742-01	BUTTON (FF) (▶▶)	
LCD1	1-805-131-11	DISPLAY PANEL, LIQUID CRYSTAL	
#4	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT	

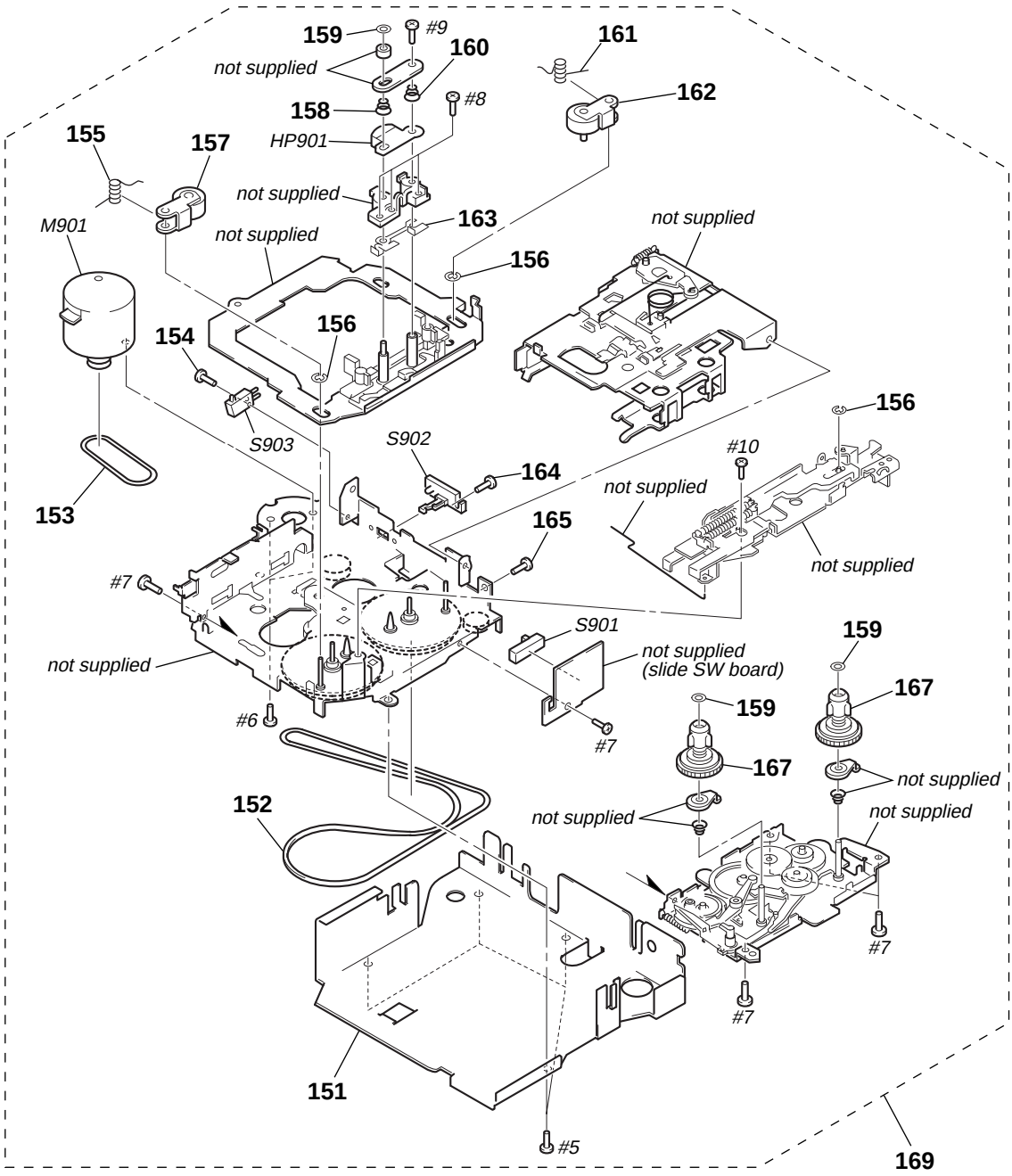
6-3. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remark
101	A-3274-623-A	MAIN BOARD, COMPLETE (CA370X)	
101	A-3274-657-A	MAIN BOARD, COMPLETE (CA370)	
* 102	3-041-578-01	BRACKET (IC)	

Ref. No.	Part No.	Description	Remark
TU100	A-3220-887-A	TUNER UNIT (TUX-030)	
#3	7-685-794-09	SCREW +PTT 2.6X10 (S)	

6-4. MECHANISM DECK SECTION (MG-36SZ13-32)



Ref. No.	Part No.	Description	Remark
151	3-246-754-01	BRACKET (MD)	
152	3-045-943-01	MAIN BELT	
153	3-045-945-01	SUB BELT (C)	
154	3-045-953-01	+MACHINE SCREW M1.7X6	
155	3-045-940-01	PINCH ARM SPG (R)	
156	3-045-950-01	E-RING (DIA. 2)	
157	3-045-890-01	PINCH ARM (R)	
158	3-045-933-01	ADJUSTER ARM SPG (B)	
159	3-045-949-01	PSW (REEL) B	
160	3-045-932-01	ADJUSTER ARM SPG (A)	
161	3-045-939-01	PINCH ARM SPG (F)	
162	3-045-891-01	PINCH ARM (F)	
163	3-045-906-01	ADJUSTER SHIM (X)	
164	3-045-952-01	+MACHINE SCREW M1.7X4	

Ref. No.	Part No.	Description	Remark
165	3-713-786-51	SCREW +P 2X3	
167	3-045-893-01	REEL SPINDLE	
169	A-3220-926-A	MECHANISM DECK ASSY (MG-36SZ13-32)	
HP901	1-500-661-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-763-507-11	MOTOR, DC (CAPSTAN/REEL)	
S901	1-771-928-11	SWITCH, SLIDE (DIRECTION)	
S902	1-771-926-11	SWITCH, LEAF (FF/REW)	
S903	1-771-927-11	SWITCH, LEAF (TAPE DETECT)	
#5	7-621-775-10	SCREW +B 2.6X4	
#6	7-627-854-08	PRECISION SCREW +P 2X2.5 TYPE 3	
#7	7-685-101-11	SCREW +PTP 2X3 NON-SLIT	
#8	7-621-255-35	SCREW +P 2X5	
#9	7-621-772-18	SCREW +P 2X4	
#10	7-685-781-09	SCREW +PTT 2X4 (S)	

SECTION 7
ELECTRICAL PARTS LIST

CONTROL

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		CONTROL BOARD			
		**********			
	1-780-021-11	CONDUCTIVE BOARD, CONNECTION			
	1-786-465-11	SWITCH, SHEET			
		< CAPACITOR >			
C952	1-115-412-11	CERAMIC CHIP	680PF	5%	25V
C953	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C954	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C955	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
		< CONNECTOR >			
CN900	1-794-312-11	PIN, CONNECTOR 12P			
		< DIODE >			
D910	8-719-033-14	LED CL-170PG-CD-T (3, REP) (CA370)			
D910	8-719-078-39	LED CL-170SR-CD-T (3, REP) (CA370X)			
D911	8-719-033-14	LED CL-170PG-CD-T (4, SHUF) (CA370)			
D911	8-719-078-39	LED CL-170SR-CD-T (4, SHUF) (CA370X)			
D912	8-719-033-14	LED CL-170PG-CD-T (5) (CA370)			
D912	8-719-078-39	LED CL-170SR-CD-T (5) (CA370X)			
D914	8-719-033-14	LED CL-170PG-CD-T (PTY, ATA) (CA370)			
D914	8-719-078-39	LED CL-170SR-CD-T (PTY, ATA) (CA370X)			
D915	8-719-033-14	LED CL-170PG-CD-T (TA) (CA370)			
D915	8-719-078-39	LED CL-170SR-CD-T (TA) (CA370X)			
D916	8-719-033-14	LED CL-170PG-CD-T (– ◀◀ I◀◀, SEEK) (CA370)			
D916	8-719-078-39	LED CL-170SR-CD-T (– ◀◀ I◀◀, SEEK) (CA370X)			
D918	8-719-033-14	LED CL-170PG-CD-T (2, DISC +) (CA370)			
D918	8-719-078-39	LED CL-170SR-CD-T (2, DISC +) (CA370X)			
D919	8-719-033-14	LED CL-170PG-CD-T (ATA) (CA370)			
D919	8-719-078-39	LED CL-170SR-CD-T (ATA) (CA370X)			
D920	8-719-033-14	LED CL-170PG-CD-T (1, DISC –) (CA370)			
D920	8-719-078-39	LED CL-170SR-CD-T (1, DISC –) (CA370X)			
D921	8-719-033-14	LED CL-170PG-CD-T (+ ▶▶ ▶▶I, SEEK) (CA370)			
D921	8-719-078-39	LED CL-170SR-CD-T (+ ▶▶ ▶▶I, SEEK) (CA370X)			
D922	8-719-033-14	LED CL-170PG-CD-T (SENS, BTM) (CA370)			
D922	8-719-078-39	LED CL-170SR-CD-T (SENS, BTM) (CA370X)			
D924	8-719-033-14	LED CL-170PG-CD-T (OFF) (CA370)			
D924	8-719-078-39	LED CL-170SR-CD-T (OFF) (CA370X)			
D930	8-719-033-14	LED CL-170PG-CD-T (DSPL) (CA370)			
D930	8-719-078-39	LED CL-170SR-CD-T (DSPL) (CA370X)			
D932	8-719-033-14	LED CL-170PG-CD-T (6) (CA370)			
D932	8-719-078-39	LED CL-170SR-CD-T (6) (CA370X)			
D933	8-719-033-14	LED CL-170PG-CD-T (AF) (CA370)			
D933	8-719-078-39	LED CL-170SR-CD-T (AF) (CA370X)			
D934	8-719-033-14	LED CL-170PG-CD-T (– (VOLUME)) (CA370)			
D934	8-719-078-39	LED CL-170SR-CD-T (– (VOLUME)) (CA370X)			
D935	8-719-033-14	LED CL-170PG-CD-T (+ (VOLUME)) (CA370)			
D935	8-719-078-39	LED CL-170SR-CD-T (+ (VOLUME)) (CA370X)			
D936	8-719-033-14	LED CL-170PG-CD-T (SEL) (CA370)			
D936	8-719-078-39	LED CL-170SR-CD-T (SEL) (CA370X)			
D937	8-719-033-14	LED CL-170PG-CD-T (MODE) (CA370)			
D937	8-719-078-39	LED CL-170SR-CD-T (MODE) (CA370X)			
D940	6-500-491-01	LED NSPW310BST (LCD BACK LIGHT)			
D941	8-719-038-07	LED CL-190PG-CD-T (SOURCE) (CA370)			
D941	8-719-061-16	LED CL-190SR-CD-T (SOURCE) (CA370X)			
D942	8-719-038-07	LED CL-190PG-CD-T (SOURCE) (CA370)			
D942	8-719-061-16	LED CL-190SR-CD-T (SOURCE) (CA370X)			
D943	8-719-038-07	LED CL-190PG-CD-T (EQ3) (CA370)			
D943	8-719-061-16	LED CL-190SR-CD-T (EQ3) (CA370X)			
D944	8-719-038-07	LED CL-190PG-CD-T (EQ3) (CA370)			
D944	8-719-061-16	LED CL-190SR-CD-T (EQ3) (CA370X)			
D960	8-719-988-61	DIODE 1SS355TE-17			
D961	8-719-988-61	DIODE 1SS355TE-17			
D962	8-719-988-61	DIODE 1SS355TE-17			
D963	8-719-988-61	DIODE 1SS355TE-17			
D964	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC900	8-759-657-06	IC LC75884W			
		< LIQUID CRYSTAL DISPLAY >			
LCD1	1-805-131-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< RESISTOR >			
R900	1-216-864-11	SHORT CHIP	0		
R901	1-216-049-11	RES-CHIP	1K	5%	1/10W
R902	1-216-049-11	RES-CHIP	1K	5%	1/10W
R903	1-216-049-11	RES-CHIP	1K	5%	1/10W
R904	1-216-049-11	RES-CHIP	1K	5%	1/10W
R905	1-216-049-11	RES-CHIP	1K	5%	1/10W
R910	1-216-025-11	RES-CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R911	1-216-810-11	RES-CHIP	120	5%	1/10W (CA370)
R911	1-216-814-11	RES-CHIP	270	5%	1/10W (CA370X)
R912	1-216-025-11	RES-CHIP	100	5%	1/10W
R913	1-216-810-11	RES-CHIP	120	5%	1/10W (CA370)
R913	1-216-814-11	RES-CHIP	270	5%	1/10W (CA370X)
R914	1-216-025-11	RES-CHIP	100	5%	1/10W
R915	1-216-025-11	RES-CHIP	100	5%	1/10W
R916	1-216-811-11	RES-CHIP	150	5%	1/10W (CA370)
R916	1-216-814-11	RES-CHIP	270	5%	1/10W (CA370X)
R917	1-216-809-11	RES-CHIP	100	5%	1/10W
R920	1-216-025-11	RES-CHIP	100	5%	1/10W
R921	1-216-811-11	RES-CHIP	150	5%	1/10W (CA370)
R921	1-216-814-11	RES-CHIP	270	5%	1/10W (CA370X)
R930	1-216-025-11	RES-CHIP	100	5%	1/10W
R931	1-216-025-11	RES-CHIP	100	5%	1/10W
R932	1-216-811-11	RES-CHIP	150	5%	1/10W (CA370)
R932	1-216-814-11	RES-CHIP	270	5%	1/10W (CA370X)
R933	1-216-025-11	RES-CHIP	100	5%	1/10W
R934	1-216-023-00	METAL CHIP	82	5%	1/10W
R935	1-216-811-11	RES-CHIP	150	5%	1/10W (CA370)
R935	1-216-815-11	RES-CHIP	330	5%	1/10W (CA370X)
R954	1-218-731-11	METAL CHIP	43K	5%	1/10W
R955	1-216-864-11	SHORT CHIP	0		
R960	1-216-033-00	METAL CHIP	220	5%	1/10W
R961	1-216-033-00	METAL CHIP	220	5%	1/10W
R962	1-216-801-11	RES-CHIP	22	5%	1/10W (CA-370)
R962	1-216-812-11	RES-CHIP	180	5%	1/10W (CA-370X)
R963	1-216-033-00	METAL CHIP	220	5%	1/10W
R964	1-216-029-00	METAL CHIP	150	5%	1/10W
R965	1-216-801-11	RES-CHIP	22	5%	1/10W (CA-370)
R965	1-216-812-11	RES-CHIP	180	5%	1/10W (CA-370X)
R966	1-216-813-11	RES-CHIP	220	5%	1/10W
R967	1-216-813-11	RES-CHIP	220	5%	1/10W

****

Ref. No.	Part No.	Description			Remark
	A-3274-623-A	MAIN BOARD, COMPLETE (CA370X)			
	A-3274-657-A	MAIN BOARD, COMPLETE (CA370)			
		**********			
*	3-041-578-01	BRACKET (IC)			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< JACK >			
ANT100	1-815-185-12	JACK (ANT) (FM/AM ANTENNA)			
		< CAPACITOR >			
C1	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C2	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C3	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C4	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C5	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6	1-124-234-00	ELECT	22uF	20%	16V
C7	1-125-701-11	DOUBLE LAYER	0.047F		5.5V
C8	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C10	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C81	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C100	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C101	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C102	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C103	1-126-163-11	ELECT	4.7uF	20%	50V
C104	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C105	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C106	1-124-584-00	ELECT	100uF	20%	10V
C108	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C109	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C200	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C201	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C202	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C203	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C204	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C205	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C206	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C207	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C208	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C209	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C210	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C211	1-124-589-11	ELECT	47uF	20%	16V
C250	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C251	1-126-157-11	ELECT	10uF	20%	16V
C262	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C302	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C303	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C304	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C305	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C306	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C310	1-104-942-11	ELECT	1uF	20%	50V
C311	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C312	1-124-584-00	ELECT	100uF	20%	10V
C314	1-124-225-11	ELECT	100uF	20%	6.3V
C400	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C401	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C402	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V

MAIN

Ref. No.	Part No.	Description			Remark
C403	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C404	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C405	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C409	1-126-157-11	ELECT	10uF	20%	16V
C410	1-124-589-11	ELECT	47uF	20%	16V
C411	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C412	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C413	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C414	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C415	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C416	1-126-163-11	ELECT	4.7uF	20%	50V
C417	1-126-163-11	ELECT	4.7uF	20%	50V
C418	1-126-163-11	ELECT	4.7uF	20%	50V
C419	1-126-163-11	ELECT	4.7uF	20%	50V
C420	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C421	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C422	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C423	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C424	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C425	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C426	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C427	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C428	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C429	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C430	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C431	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C451	1-124-589-11	ELECT	47uF	20%	16V
C452	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C453	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C500	1-124-589-11	ELECT	47uF	20%	16V
C501	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C502	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C503	1-125-889-11	CERAMIC CHIP	2.2uF	10%	10V
C504	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C505	1-126-157-11	ELECT	10uF	20%	16V
C506	1-126-157-11	ELECT	10uF	20%	16V
C507	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C508	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C520	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C521	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C522	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C523	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C600	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C601	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C650	1-104-942-11	ELECT	1uF	20%	50V
C700	1-126-936-11	ELECT	3300uF	20%	16V
C701	1-165-128-11	CERAMIC CHIP	0.22uF		16V
C710	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C730	1-126-157-11	ELECT	10uF	20%	16V
C731	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C732	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C733	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C734	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C740	1-126-157-11	ELECT	10uF	20%	16V
C741	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C742	1-124-584-00	ELECT	100uF	20%	10V
C800	1-126-940-11	ELECT	330uF	20%	16V
C801	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description	Remark
		< CONNECTOR/JACK >	
* CN300	1-564-705-11	PIN, CONNECTOR (PC BOARD) 3P	
* CN350	1-573-486-11	PIN, CONNECTOR (PC BOARD) 8P	
CN400	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN, AUDIO OUT)	
CN600	1-794-311-21	PLUG, CONNECTOR 12P	
CN700	1-774-701-11	PIN, CONNECTOR 16P (POWER)	
CN800	1-580-907-31	PLUG, CONNECTOR 12P (BUS CONTROL IN)	
		< DIODE >	
D250	8-719-921-42	DIODE MTZJ-5.1A	
D253	8-719-991-33	DIODE 1SS133T-77	
D300	8-719-991-33	DIODE 1SS133T-77	
D350	8-719-200-82	DIODE 11ES2	
D451	8-719-991-33	DIODE 1SS133T-77	
D452	8-719-110-03	DIODE RD7.5ESB2	
D500	8-719-200-82	DIODE 11ES2	
D501	8-719-200-82	DIODE 11ES2	
D502	8-719-200-82	DIODE 11ES2	
D503	8-719-200-82	DIODE 11ES2	
D504	8-719-200-82	DIODE 11ES2	
D505	8-719-200-82	DIODE 11ES2	
D506	8-719-200-82	DIODE 11ES2	
D507	8-719-200-82	DIODE 11ES2	
D650	8-719-110-49	DIODE RD18ES-B2	
D651	8-719-991-33	DIODE 1SS133T-77	
D653	8-719-109-93	DIODE RD6.2ESB2	
D700	8-719-049-38	DIODE 1N5404TU	
D721	8-719-200-82	DIODE 11ES2	
D722	8-719-200-82	DIODE 11ES2	
D723	8-719-200-82	DIODE 11ES2	
D724	8-719-200-82	DIODE 11ES2	
D731	8-719-110-14	DIODE RD9.1ES-B3	
D741	8-719-935-39	DIODE HZS6B1LTD	
D742	8-719-991-33	DIODE 1SS133T-77	
D800	8-719-109-97	DIODE RD6.8ES-B2	
D802	8-719-110-49	DIODE RD18ES-B2	
D803	8-719-110-49	DIODE RD18ES-B2	
D805	8-719-110-49	DIODE RD18ES-B2	
		< IC >	
IC1	6-802-511-01	IC MN101C49KSF	
IC2	6-701-405-01	IC PST3443UL	
IC200	6-703-809-01	IC SAA6588T/V2-518	
IC300	6-802-510-01	IC HA12232FP-EL	
IC400	6-703-302-01	IC BD3803F-FE2	
IC500	8-759-486-44	IC TDA7386	
IC800	8-759-096-16	IC MM1175XFF	
		< SHORT >	
JC30	1-216-864-11	SHORT CHIP 0	
JC44	1-216-864-11	SHORT CHIP 0	
JC49	1-216-864-11	SHORT CHIP 0	
JC52	1-216-864-11	SHORT CHIP 0	
JC53	1-216-864-11	SHORT CHIP 0	
JC72	1-216-864-11	SHORT CHIP 0	
JC74	1-216-864-11	SHORT CHIP 0	

MAIN

Ref. No.	Part No.	Description			Remark
JC75	1-216-864-11	SHORT CHIP	0		
JC83	1-216-864-11	SHORT CHIP	0		
JC91	1-216-864-11	SHORT CHIP	0		
JC104	1-216-864-11	SHORT CHIP	0		
JC110	1-216-864-11	SHORT CHIP	0		
JC132	1-216-864-11	SHORT CHIP	0		
JC133	1-216-864-11	SHORT CHIP	0		
JC134	1-216-864-11	SHORT CHIP	0		
JC147	1-216-864-11	SHORT CHIP	0		
JC148	1-216-864-11	SHORT CHIP	0		
JC166	1-216-864-11	SHORT CHIP	0		
JC168	1-216-864-11	SHORT CHIP	0		
JC169	1-216-864-11	SHORT CHIP	0		
JC170	1-216-864-11	SHORT CHIP	0		
JC173	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L1	1-410-509-11	INDUCTOR	10uH		
L700	1-419-476-11	COIL, CHOKE	250uH		
		< TRANSISTOR >			
Q100	8-729-043-29	TRANSISTOR	PDTC144EK-115		
Q251	8-729-920-85	TRANSISTOR	2SD1664-QR		
Q252	8-729-049-85	TRANSISTOR	2PB710AR-115		
Q253	8-729-043-27	TRANSISTOR	PDTC114EK-115		
Q350	8-729-205-95	TRANSISTOR	2SA1428-Y		
Q351	8-729-043-27	TRANSISTOR	PDTC114EK-115		
Q400	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q401	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q402	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q403	8-729-920-21	TRANSISTOR	DTC314TK-T-146		
Q450	8-729-043-32	TRANSISTOR	PDTA114EK-115		
Q451	8-729-043-29	TRANSISTOR	PDTC144EK-115		
Q650	8-729-422-33	TRANSISTOR	2PD601A-Q-TX		
Q651	8-729-216-22	TRANSISTOR	2SA1162-G		
Q710	8-729-205-95	TRANSISTOR	2SA1428-Y		
Q711	8-729-043-27	TRANSISTOR	PDTC114EK-115		
Q722	8-729-205-95	TRANSISTOR	2SA1428-Y		
Q724	8-729-205-95	TRANSISTOR	2SA1428-Y		
Q725	8-729-043-27	TRANSISTOR	PDTC114EK-115		
Q726	8-729-043-27	TRANSISTOR	PDTC114EK-115		
Q730	8-729-921-48	TRANSISTOR	2SD1760F5-Q		
Q731	8-729-216-22	TRANSISTOR	2SA1162-G		
Q732	8-729-043-27	TRANSISTOR	PDTC114EK-115		
Q740	8-729-205-95	TRANSISTOR	2SA1428-Y		
Q741	8-729-422-33	TRANSISTOR	2PD601A-Q-TX		
Q800	8-729-043-27	TRANSISTOR	PDTC114EK-115		
		< RESISTOR >			
R1	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2	1-216-864-11	SHORT CHIP	0		
R3	1-216-845-11	METAL CHIP	100K	5%	1/10W
R4	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5	1-216-809-11	METAL CHIP	100	5%	1/10W
R6	1-216-809-11	METAL CHIP	100	5%	1/10W
R7	1-216-821-11	METAL CHIP	1K	5%	1/10W
R8	1-216-809-11	METAL CHIP	100	5%	1/10W
R9	1-216-809-11	METAL CHIP	100	5%	1/10W
R10	1-216-809-11	METAL CHIP	100	5%	1/10W
R11	1-216-809-11	METAL CHIP	100	5%	1/10W
R12	1-249-441-11	CARBON	100K	5%	1/4W
R13	1-216-809-11	METAL CHIP	100	5%	1/10W
R14	1-216-845-11	METAL CHIP	100K	5%	1/10W
R16	1-216-845-11	METAL CHIP	100K	5%	1/10W
R17	1-216-841-11	METAL CHIP	47K	5%	1/10W
R18	1-216-809-11	METAL CHIP	100	5%	1/10W
R19	1-247-807-31	CARBON	100	5%	1/4W
R20	1-247-807-31	CARBON	100	5%	1/4W
R21	1-216-809-11	METAL CHIP	100	5%	1/10W
R22	1-216-809-11	METAL CHIP	100	5%	1/10W
R23	1-216-833-11	METAL CHIP	10K	5%	1/10W
R24	1-216-833-11	METAL CHIP	10K	5%	1/10W
R25	1-216-809-11	METAL CHIP	100	5%	1/10W
R26	1-216-809-11	METAL CHIP	100	5%	1/10W
R27	1-247-807-31	CARBON	100	5%	1/4W
R28	1-216-864-11	SHORT CHIP	0 (CA370X)		
R29	1-216-845-11	METAL CHIP	100K	5%	1/10W (CA370)
R31	1-216-845-11	METAL CHIP	100K	5%	1/10W
R32	1-216-864-11	SHORT CHIP	0		
R35	1-216-845-11	METAL CHIP	100K	5%	1/10W
R37	1-216-845-11	METAL CHIP	100K	5%	1/10W
R38	1-249-441-11	CARBON	100K	5%	1/4W
R39	1-249-441-11	CARBON	100K	5%	1/4W
R40	1-249-441-11	CARBON	100K	5%	1/4W
R43	1-216-864-11	SHORT CHIP	0		
R44	1-247-807-31	CARBON	100	5%	1/4W
R46	1-247-807-31	CARBON	100	5%	1/4W
R47	1-216-809-11	METAL CHIP	100	5%	1/10W
R48	1-247-807-31	CARBON	100	5%	1/4W
R49	1-216-809-11	METAL CHIP	100	5%	1/10W
R50	1-247-807-31	CARBON	100	5%	1/4W
R51	1-247-807-31	CARBON	100	5%	1/4W
R53	1-247-807-31	CARBON	100	5%	1/4W
R54	1-216-809-11	METAL CHIP	100	5%	1/10W
R55	1-216-809-11	METAL CHIP	100	5%	1/10W
R56	1-216-864-11	SHORT CHIP	0		
R57	1-216-864-11	SHORT CHIP	0		
R58	1-249-417-11	CARBON	1K	5%	1/4W
R59	1-249-417-11	CARBON	1K	5%	1/4W
R60	1-216-809-11	METAL CHIP	100	5%	1/10W
R61	1-249-417-11	CARBON	1K	5%	1/4W
R62	1-249-417-11	CARBON	1K	5%	1/4W
R81	1-216-845-11	METAL CHIP	100K	5%	1/10W
R100	1-216-809-11	METAL CHIP	100	5%	1/10W
R101	1-216-837-11	METAL CHIP	22K	5%	1/10W
R102	1-249-390-11	CARBON	5.6	5%	1/4W
R104	1-216-864-11	SHORT CHIP	0		
R105	1-216-821-11	METAL CHIP	1K	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R200	1-216-853-11	METAL CHIP	470K	5%	1/10W
R201	1-216-821-11	METAL CHIP	1K	5%	1/10W
R202	1-216-837-11	METAL CHIP	22K	5%	1/10W
R203	1-216-864-11	SHORT CHIP	0		
R204	1-216-817-11	METAL CHIP	470	5%	1/10W

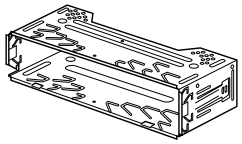
MAIN

Ref. No.	Part No.	Description			Remark
R206	1-249-393-11	CARBON	10	5%	1/4W
R207	1-249-393-11	CARBON	10	5%	1/4W
R208	1-216-813-11	RES-CHIP	220	5%	1/10W
R209	1-216-813-11	RES-CHIP	220	5%	1/10W
R250	1-216-817-11	METAL CHIP	470	5%	1/10W
R259	1-216-833-11	METAL CHIP	10K	5%	1/10W
R262	1-216-821-11	METAL CHIP	1K	5%	1/10W
R263	1-216-797-11	METAL CHIP	10	5%	1/10W
R264	1-216-821-11	RES-CHIP	1K	5%	1/10W
R300	1-216-841-11	METAL CHIP	47K	5%	1/10W
R301	1-216-841-11	METAL CHIP	47K	5%	1/10W
R302	1-216-809-11	METAL CHIP	100	5%	1/10W
R303	1-216-809-11	METAL CHIP	100	5%	1/10W
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-809-11	METAL CHIP	100	5%	1/10W
R306	1-216-806-11	METAL CHIP	56	5%	1/10W
R307	1-216-806-11	METAL CHIP	56	5%	1/10W
R308	1-216-851-11	METAL CHIP	330K	5%	1/10W
R309	1-216-851-11	METAL CHIP	330K	5%	1/10W
R310	1-216-835-11	METAL CHIP	15K	5%	1/10W
R311	1-216-835-11	METAL CHIP	15K	5%	1/10W
R312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R313	1-216-821-11	METAL CHIP	1K	5%	1/10W
R314	1-216-797-11	METAL CHIP	10	5%	1/10W
R350	1-216-833-11	METAL CHIP	10K	5%	1/10W
R351	1-249-419-11	CARBON	1.5K	5%	1/4W
R352	1-249-419-11	CARBON	1.5K	5%	1/4W
R353	1-217-806-11	RES-CHIP	1	5%	1/8W
R400	1-216-797-11	METAL CHIP	10	5%	1/10W
R401	1-216-840-11	METAL CHIP	39K	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-841-11	METAL CHIP	47K	5%	1/10W
R407	1-216-841-11	METAL CHIP	47K	5%	1/10W
R408	1-216-841-11	METAL CHIP	47K	5%	1/10W
R409	1-216-841-11	METAL CHIP	47K	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R413	1-216-809-11	METAL CHIP	100	5%	1/10W
R414	1-216-821-11	METAL CHIP	1K	5%	1/10W
R415	1-216-821-11	METAL CHIP	1K	5%	1/10W
R416	1-216-833-11	METAL CHIP	10K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
R420	1-216-809-11	METAL CHIP	100	5%	1/10W
R421	1-216-809-11	METAL CHIP	100	5%	1/10W
R422	1-216-864-11	SHORT CHIP	0		
R423	1-216-864-11	SHORT CHIP	0		
R450	1-216-805-11	METAL CHIP	47	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R452	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R500	1-216-833-11	METAL CHIP	10K	5%	1/10W
R501	1-216-801-11	METAL CHIP	22	5%	1/10W
R502	1-216-833-11	METAL CHIP	10K	5%	1/10W
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W
R600	1-249-417-11	CARBON	1K	5%	1/4W
R601	1-249-417-11	CARBON	1K	5%	1/4W
R602	1-249-417-11	CARBON	1K	5%	1/4W
R603	1-249-417-11	CARBON	1K	5%	1/4W
R604	1-249-417-11	CARBON	1K	5%	1/4W
R605	1-249-417-11	CARBON	1K	5%	1/4W
R606	1-249-417-11	CARBON	1K	5%	1/4W
R607	1-216-821-11	METAL CHIP	1K	5%	1/10W
R650	1-249-425-11	CARBON	4.7K	5%	1/4W
R651	1-216-841-11	METAL CHIP	47K	5%	1/10W
R652	1-216-841-11	METAL CHIP	47K	5%	1/10W
R653	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R654	1-216-845-11	METAL CHIP	100K	5%	1/10W
R655	1-216-841-11	METAL CHIP	47K	5%	1/10W
R656	1-216-838-11	METAL CHIP	27K	5%	1/10W
R657	1-216-809-11	METAL CHIP	100	5%	1/10W
R663	1-216-845-11	METAL CHIP	100K	5%	1/10W
R664	1-216-821-11	METAL CHIP	1K	5%	1/10W
R710	1-260-300-11	CARBON	4.7	5%	1/2W
R711	1-249-419-11	CARBON	1.5K	5%	1/4W
R712	1-249-419-11	CARBON	1.5K	5%	1/4W
R713	1-216-833-11	METAL CHIP	10K	5%	1/10W
R720	1-216-833-11	METAL CHIP	10K	5%	1/10W
R721	1-247-749-11	CARBON	560	5%	1/2W
R722	1-216-864-11	SHORT CHIP	0		
R725	1-247-749-11	CARBON	560	5%	1/2W
R728	1-216-833-11	METAL CHIP	10K	5%	1/10W
R730	1-216-833-11	METAL CHIP	10K	5%	1/10W
R731	1-249-421-11	CARBON	2.2K	5%	1/4W
R732	1-216-817-11	METAL CHIP	470	5%	1/10W
R740	1-216-837-11	METAL CHIP	22K	5%	1/10W
R800	1-216-833-11	METAL CHIP	10K	5%	1/10W
R801	1-216-809-11	METAL CHIP	100	5%	1/10W
R802	1-216-809-11	METAL CHIP	100	5%	1/10W
R804	1-216-797-11	METAL CHIP	10	5%	1/10W
R811	1-249-417-11	CARBON	1K	5%	1/4W
R814	1-216-849-11	METAL CHIP	220K	5%	1/10W
R815	1-216-864-11	SHORT CHIP	0		
R852	1-216-864-11	SHORT CHIP	0		
R853	1-216-864-11	SHORT CHIP	0		
		< SWITCH >			
S1	1-692-431-21	SWITCH, TACTILE (RESET)			
		< THERMISTOR >			
TH700	1-801-726-11	THERMISTOR, POSITIVE			
TH701	1-801-726-11	THERMISTOR, POSITIVE			
TH800	1-801-792-21	THERMISTOR, POSITIVE			
		< TUNER >			
TU100	A-3220-887-A	TUNER UNIT (TUX-030)			
		< VIBRATOR >			
X1	1-795-539-11	VIBRATOR, CRYSTAL (18.432MHz)			

Ref. No.	Part No.	Description	Remark
X2	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)	
X200	1-579-242-11	VIBRATOR, CRYSTAL (4.332MHz)	
**********			
		MISCELLANEOUS	
		**********	
6	1-757-662-11	CORD (WITH CONNECTOR) (ISO) (POWER)	
57	1-780-021-11	CONDUCTIVE BOARD, CONNECTION	
58	1-786-465-11	SWITCH, SHEET	
169	A-3220-926-A	MECHANISM DECK ASSY (MG-36SZ13-32)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
HP901	1-500-661-11	HEAD, MAGNETIC (PLAYBACK)	
LCD1	1-805-131-11	DISPLAY PANEL, LIQUID CRYSTAL	
M901	1-763-507-11	MOTOR, DC (CAPSTAN/REEL)	
S901	1-771-928-11	SWITCH, SLIDE (DIRECTION)	
S902	1-771-926-11	SWITCH, LEAF (FF/REW)	
S903	1-771-927-11	SWITCH, LEAF (TAPE DETECT)	
**********			
		ACCESSORIES	
		**********	
	3-246-852-42	MANUAL, INSTRUCTION (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH)	
	3-246-853-41	MANUAL, INSTRUCTION, INSTALL (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH)	
**********			

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	X-3382-647-1	FRAME ASSY, FITTING	
502	3-386-828-21	SCREW, FITTING	
503	3-349-410-11	BUSHING	
504	3-246-758-01	COLLAR	
505	1-465-459-21	ADAPTER, ANTENNA	
506	1-757-662-11	CORD (WITH CONNECTOR) (ISO) (POWER)	
507	3-246-471-01	KEY (FRAME)	

501



FITTING FRAME ASSY
× 1

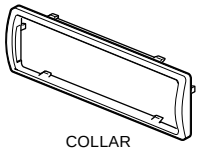
502

FITTING SCREW
× 1

503

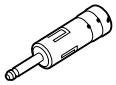
BUSHING
× 1

504



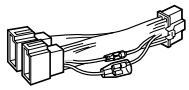
COLLAR
× 1

505



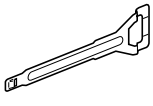
ANTENNA ADAPTER
× 1

506



POWER CORD
× 1

507



KEY (FRAME)
× 2

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2002.11	New
1.1	2002.12	Addition of Ref. No. 61, 62, 63 to EXPLODED VIEWS (ENG-02014)
1.2	2003.02	Addition of JIG Correction of Part No. for Ref. No. 57, 58, LCD1 and D940 on CONTROL board (ECN-CSA06620/CSA06687/SPM-03004)